TECHNICAL DEPARTMENT

Modern packaging

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Nominated for packaging's Hall of Fame. Story on Page 100

YES!

Non-inflammable

an **EMULSION** adhesive successfully bonds

Moistureproof Cellophane to Chipboard

Acetate to Chipboard or Envelope Stock

Address: 270 Madison Avenue, NEW YORK 16; 3641 So. Washtenaw Avenue, CHICAGO 32; 735 Battery Street, SAN FRANCISCO 11; and other principal cities. In CANADA: Meredith, Simmons & Co., Ltd., TORONTO and MONTREAL. In ENGLAND: National Adhesives, Ltd., SLOUGH.

National ADHESIVES

CELLU-LOK is a new emulsion adhesive that replaces lacquer type adhesives. CELLU-LOK is a white, fluid "RESYN" emulsion that dries to a clean, colorless, transparent film . . . thins with water . . . eliminates inflammable solvents . . . helps prevent bleeding of inks and penetration . . . reduces drying time from days — *to several hours* . . . has a quick initial tack and is non-blocking. Has CELLU-LOK been fully tested? Yes! For fifteen months in the field. Like to test CELLU-LOK? We'll be glad to supply a test run sample and the services of a National technician to work with you in your plant.

EVERY TYPE OF ADHESIVE FOR EVERY INDUSTRIAL USE

TECHNOLOGY DEPARTMENT

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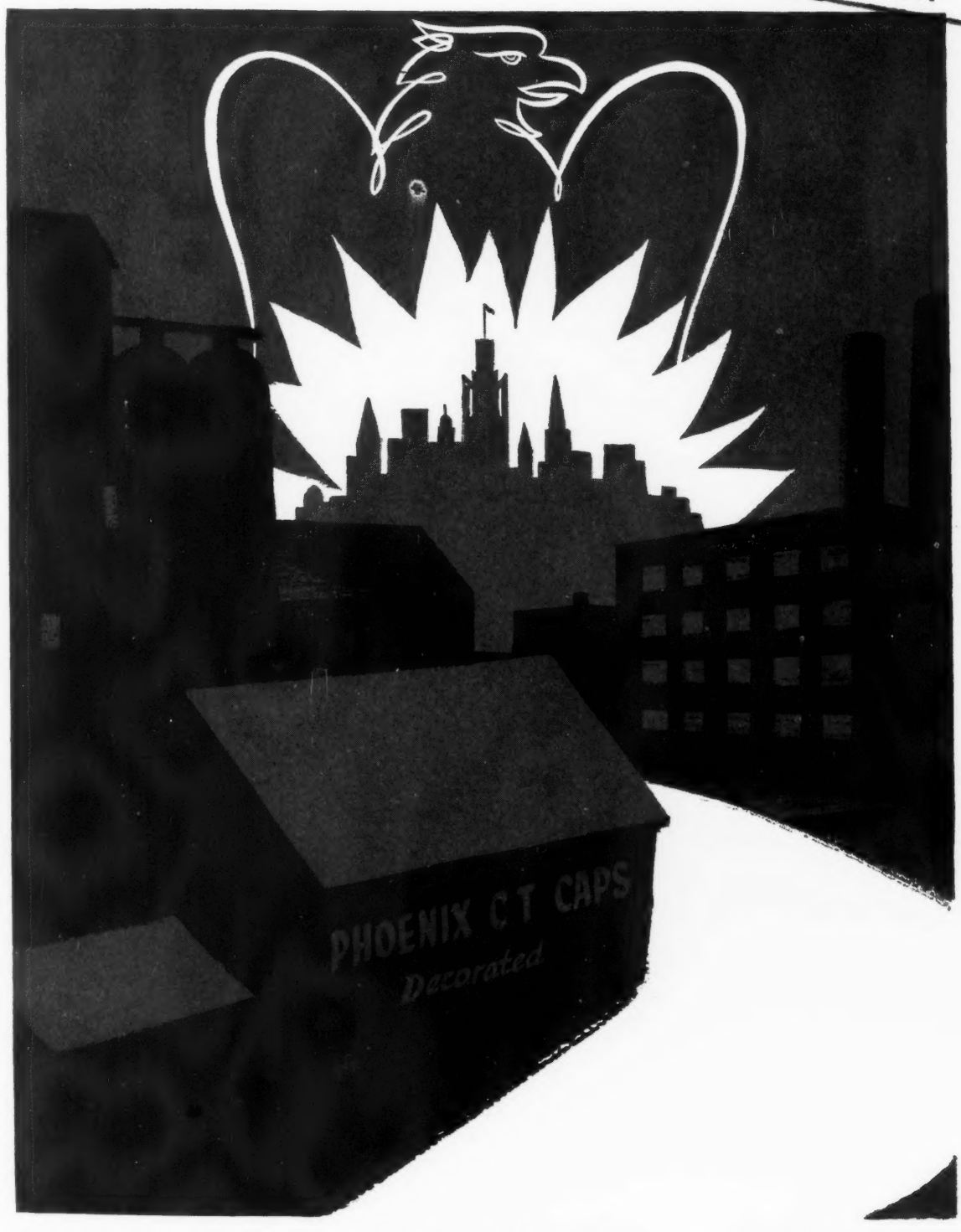

PHOENIX METAL CAP CO. ★ *Metal Caps for Glass Packages* ★ Chicago 8, Brooklyn 18

Modern packaging

Vol. 22 No. 9 May 1949

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Each of these leading U. S. Manufacturers (and more) had a packaging "problem"—solved by REDINGTON.

CARTONERS
one of many for practically any solid item

THERE'S ALWAYS BEEN A REDINGTON TO "DO IT FASTER, BETTER, MORE ECONOMICALLY"

Outstanding REDINGTON Cartoners of this type are available for inserting your bottles, collapsible tubes, bars, jars—almost *any* solid item or container—into glued-end or tuck-end cartons. Added *plus* features (optional) include: circular folding-and-inserting mechanism; corrugated protector mechanism; code stamping device; mechanisms for pre-wrapping item before insertion, and for wrapping carton.

SPECIAL PACKAGING MACHINES
that defy classification

Outstanding REDINGTON *Special* Machines have been designed to pack tins of tablets . . . fill envelopes . . . wrap cans . . . toilet tissue . . . uniquely-shaped bottles . . . candy fruit drops . . . soap. Whatever your "special" packaging problem may be, consult REDINGTON *and solve it!*

F. B. REDINGTON CO. *Established 1897* 108 S. SANGAMON ST., CHICAGO 7, ILL.

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LET'S CARRY THE FLAG

ANY TRAVELER returning from Europe today can testify to the effectiveness of the stars-and-stripes label appearing on packing cases stacked on docks, on railroad sidings and in factory yards. It is tangible evidence of the billions that U. S. taxpayers are staking on European recovery—and friendship. Yet the Economic Recovery Administration has found it necessary to appeal once more to packagers to make sure that the emblem appears, as specified, on each container destined for Marshall Plan shipment. There are apparently no means of enforcing this labeling; it depends on voluntary cooperation. Governments of countries participating in the program have the responsibility of requiring that their importers inform suppliers that the emblem "must" appear on all packaged goods. But there the responsibility ends. No means are provided for inspecting shipments at this end and there is no likelihood of any shipment being refused on the other side merely because it does not carry the U. S. emblem.

The ECA does not supply quantities of the emblems, but it will gladly furnish samples from which decals, stencils or labels can be made. Some 30,000 samples have been distributed to trade associations, chambers of commerce, field offices of the Department of Commerce and the trade in general. It is not difficult to obtain a copy. The emblem could, in fact, be photostated from the reproduction that appears on this page.

It is not merely a question of patriotism. Any business man who has any regard for the wise investment of his tax dollars will see to it that every Marshall Plan package that goes out of his shipping room flies the red, white and blue in the prescribed manner.

The Editors

Savings of 20% on packaging cost and 40% on labor are reported by Minette Mills after replacing hand-tied satin ribbons with attractive cellophane wrappers, processed by Dobeckmun.

Cure for sales slowdowns...

BETTER PACKAGES

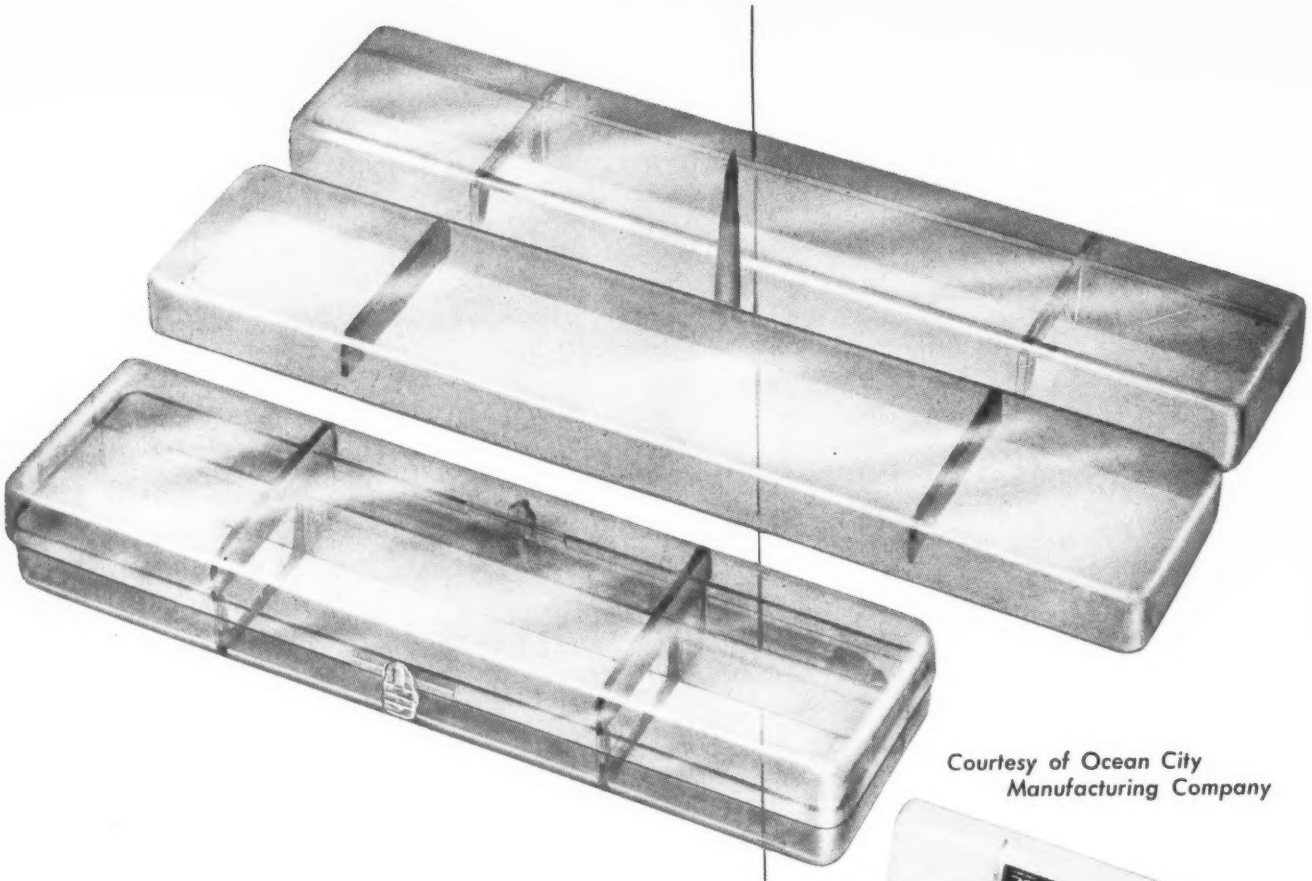
Quality, colors, patterns flash into view through transparent packages by Dobeckmun. Yet, careless handling can't soil or harm contents, to cause shopworn appearance and costly markdowns.

Brand name and product information gain dramatic impact when printed on cellophane. Costs of expensive decoration can often be saved—and products obtain "front seats" in display and in buyers' attention.

Available in bags and sheets or in rolls for high-speed, automatic packaging machines, Dobeckmun wrappings provide glamour, sales appeal and protection. Ask for samples and suggestions for your products. *The Dobeckmun Company, Cleveland 1, Ohio. West Coast Division, Berkeley 2, California.*

Branch offices: **Atlanta, Boston, Chicago, Cincinnati, Los Angeles, New York, Philadelphia, Portland, St. Louis, St. Paul and Seattle. Representatives everywhere.**

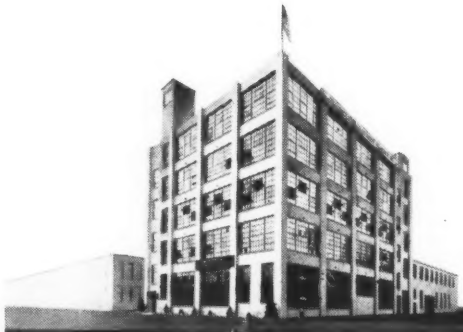
Self-selling packages in processed films and foils



Courtesy of Ocean City Manufacturing Company

Catch More Customers ..HOOK, LINE AND PLASTIC PACKAGE

Today's buyers' market imposes more rigid demands than ever upon the packaging of your product. Plastic custom injection moulding, as we have successfully applied it, has opened an entirely new field of packaging apart from any other form of container or material. Injection moulding introduces for the first time such qualities in a package as strength, brilliant display value, long continued re-use and weight so often desired. Every one of these characterizes the Ocean City Tackle Box illustrated here. Our experience in plastic moulded packages is well fortified. We have the largest, exclusively custom injection facilities anywhere in the East. We would like to sit down with you to talk about your packaging.



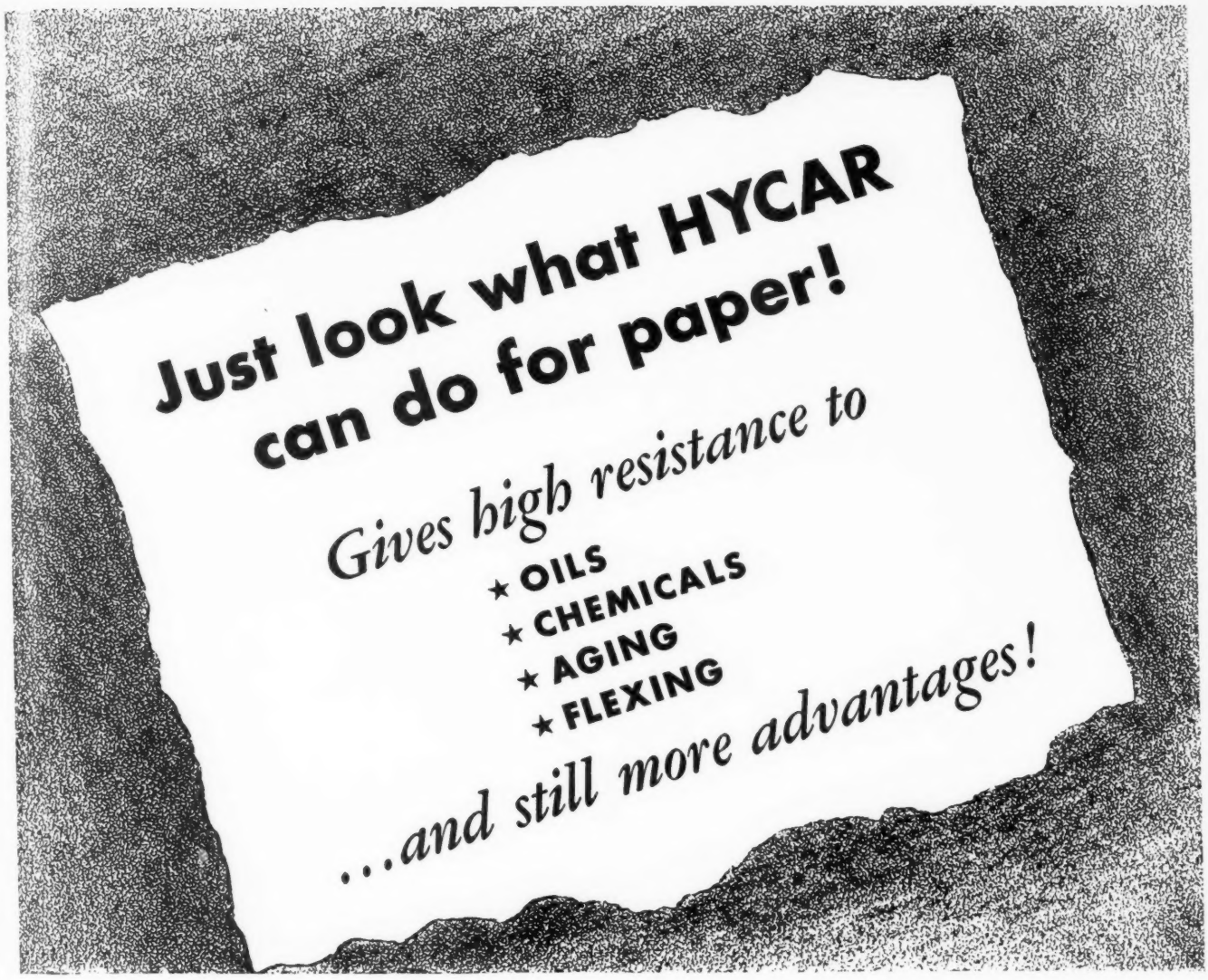
Custom Injection Moulding

WORCESTER MOULDED PLASTICS CO.

14 HYGEIA STREET, WORCESTER 8, MASS.

17 East 42nd St., New York 17, N. Y.

130 West Chippewa St., Buffalo 2, N. Y.



★ Hycar American Rubber Latex, used as a coating or impregnant, gives paper new properties that make possible a wide range of profitable applications.

It makes paper highly resistant to many damaging factors. It increases tear and wet strength—makes soft but strong smooth-draping sheets.

Hycar latex may be added to paper before or after sheet formation. It can be used to modify other resins used in coating or impregnation. It can make phenolics tough instead of brittle. It can plasticize vinyls *permanently*—eliminate plasticizer migration.

Moreover, Hycar-based adhesives permanently bond paper—as well as wood, leather, aluminum foil, vinyl films and other materials.

Best of all—Hycar latex can be used safely, simply, easily. No vulcanization is required. Normal drying times are used. No explosive solvents need be handled, nor are costly solvent recovery systems needed.

We will be glad to work with you on applications or problems relating to the use of Hycar latex. For more information, please write Dept. HG-2, B. F. Goodrich Chemical Company, Rose Bldg., Cleveland 15, Ohio.

Hycar
Reg. U. S. Pat. Off.
American Rubber

B. F. Goodrich Chemical Company
A DIVISION OF THE B. F. GOODRICH COMPANY

GEON polyvinyl materials • HYCAR American rubber • GOOD-RITE chemicals and plasticizers

FAST BEADING
SHEET PLASTIC

Taber THERMOBEADERS

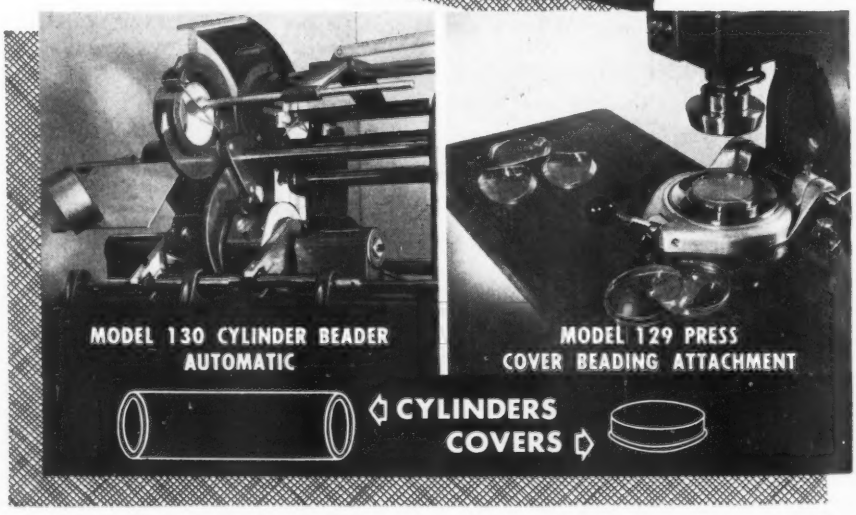
We illustrate here five precision built production beading machines covering all the principle types of beading used by transparent box makers.

As fast as the operator can feed the blanks, our Model 128 Straight Edge Beading Machine will produce the wide variety of edges-shapes shown through the use of quickly interchangeable dies. Beaded loops from 4″ up to unlimited size for sides and covers and of boxes can be run off quickly with this Model 128 Straight Edge Beader. The strip is first beaded and then the ends cemented together to form a loop.

Cylinders may be beaded on either the Model 130 Automatic Indexing Type Cylinder Beader or the new Model 135. Both of these machines are designed to bead the maximum number of cylinders that is possible from a single set of dies (sizes 1½″ to 8¼″ diam.) Attachments to accommodate narrow beaded cylinders or covers for cylinders can be furnished for both Models 130 and 135.

TABER also makes hydraulic and air presses for beading, embossing or jacketing covers. Model 129 illustrated is shown beading 4″ diameter covers.

NEW ⇨ (CYLINDERS)



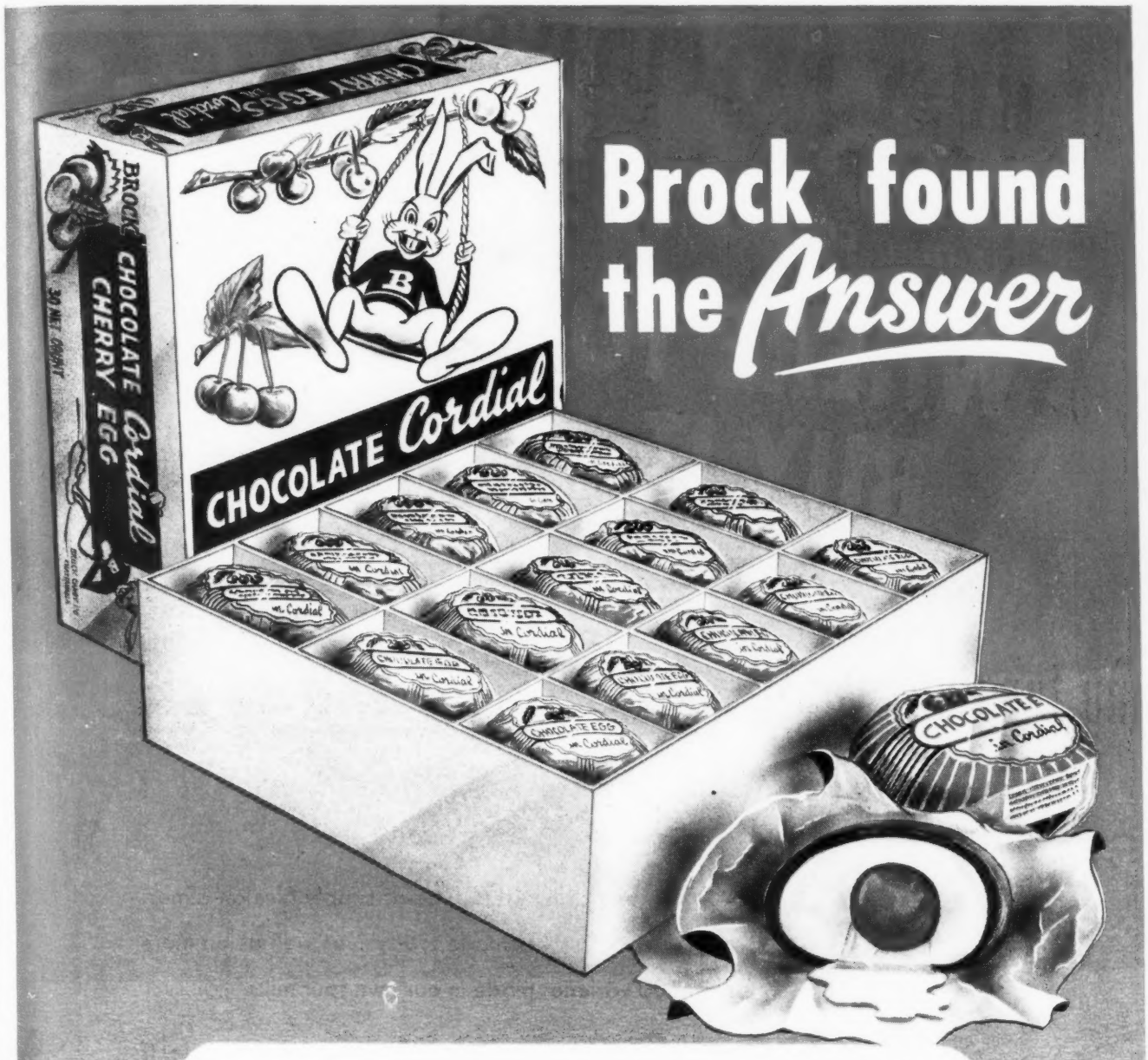
WRITE FOR INFORMATION AND PRICES

DEMONSTRATIONS ARRANGED AT YOUR CONVENIENCE

Taber INSTRUMENT CORPORATION

119 GOUNDRY ST., NORTH TONAWANDA, N. Y.

BETWEEN BUFFALO AND NIAGARA FALLS



Brock found the *Answer*

When the Brock Candy Company packaged their famous Chocolate Cordial Cherry Egg, Traver Corporation furnished the answer for two most important features—sales appeal and product protection. Each delicious Chocolate Cordial Cherry Egg goes to market snugly wrapped in a colorfully printed foil wrapper thoroughly protected from breaking and crushing by Traver's LOXTITE partitions. When you buy from Traver Corporation there is no need to go to several sources. We supply everything for flexible packaging—bags—overwraps in sheet or roll form—partitions—trays—boats—stiffeners.

Sales Offices in Chicago, New York, Philadelphia, Pittsburgh, Cleveland, Kansas City, St. Louis, Dallas, Detroit, Oakland.

Traver CORPORATION

TRAVER CORPORATION
366 W. Ontario Street, Chicago 10, Illinois

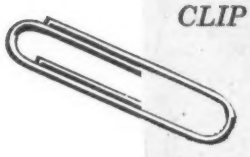
CONVERTERS AND PRINTERS OF CELLOPHANE, PLASTICS, ACETATES, FOIL AND GLASSINE

for BUSY EXECUTIVES

any type of special PACKAGING PAPER

We maintain complete source-of-supply files on almost every type of paper made today...as well as on more than 600 varieties made in our own four mills.

Tell us what you are looking for, or send us a sample. If we don't make it, we will give you a list of mills who do... promptly and without any obligation or sales follow-up.

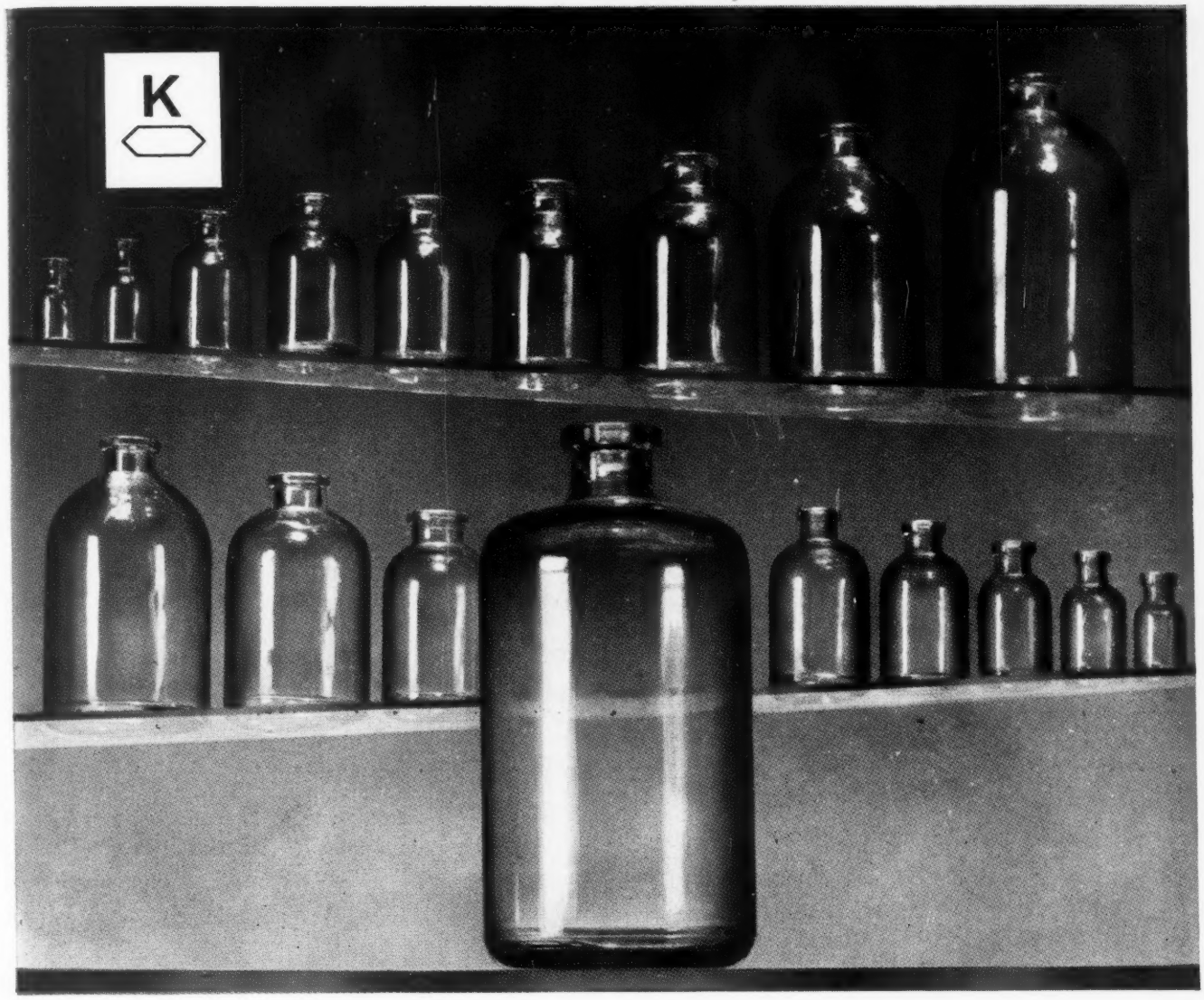


CLIP SAMPLE TO LETTERHEAD, MAIL TO

"WHERE TO BUY IT" SERVICE
RIEGEL PAPER CORPORATION
342 Madison Avenue, New York 17, N. Y.

Riegel

TAILOR-MADE PAPERS FOR INDUSTRIAL USE SINCE 1862



NEUTRAGLAS...

serenely indifferent to whatever it contains!

• Neutraglas is the most resistant glass it is practicable to mold into a container. Solvents, chemicals, sterilizing agents, and even distilled water get nowhere at all with Neutraglas ... it just keeps on stubbornly resisting any kind of alliance or contamination.

Neutraglas' protection *goes clear through*. No detergent and no method of sterilization can lower its safety factor in the least degree.

Neutraglas certifies utmost safety to the purity, potency and pH factor of contained products. *Specify Neutraglas for utmost protection.*

KIMBLE GLASS TOLEDO 1, OHIO

Division of Owens-Illinois Glass Company

From bubble bath to BULLDOZERS

There seems to be no end to the adaptability...and salability...of gelatin containers. There is no better example of the advantages of these unit packages than the success being achieved with them in the cosmetic field.

The translucent colors and the varied shapes of gelatin containers for bubble bath, bath oils, sun tan lotion, and similar cosmetics, are setting a pace that puts a gleam in any sales manager's eye.

Attractiveness, however, is not the only feature of gelatin containers. Accurate unit measure, air tight sealing, product protection, convenience...these and other advantages have made this unique packaging concept the money-making answer to such perplexing problems as smoke for toy trains, cigarette lighter fluid, pie filling, margarine coloring, insect repellent, engine starting fluid, chicken fat...even golf ball centers and adhesives.

Last—not least—gelatin containers are economical. The Rotary Die Process by which these containers are produced assures minimum costs.

Do you have a packaging problem? Can the unit gelatin container solve it for you?

GELATIN PRODUCTS division, R. P. SCHERER CORPORATION,
9425 GRINNELL AVE., DETROIT 13, MICHIGAN

...send me a gelatin container...

NAME _____

ADDRESS _____

_____

GELATIN PRODUCTS *division*

R. P. SCHERER CORPORATION

9425 GRINNELL AVENUE, DETROIT 13, MICHIGAN

ASSOCIATED PLANTS IN SLOUGH, BUCKS, ENGLAND, AND WINDSOR, ONTARIO, CANADA

AVENIZED • MYCOBAN & DRY WAXED PARCHMENT

•

BUTTER WRAPPERS

•

OLEOMARGARINE WRAPPERS

•

MILK & ICE CREAM CAN TOPS

•

MEAT WRAPPERS

•

LARD CARTON LINERS

•

VEGETABLE SHORTENING CARTON LINERS

•

BUTTER TUB LINERS & CIRCLES

•

BUTTER BOX LINERS

•

SLICED BACON WRAPPERS

•

FISH FILLET WRAPPERS & INSERTS

•

CELERY WRAPPERS

•

LINERS FOR MEAT TINS

•

POULTRY WRAPPERS

•

CHEESE WRAPPERS

•

TAMALE WRAPPERS

•

MANY OTHERS

West Carrollton GENUINE VEGETABLE Parchment

IS VERSATILE, TOO!

The real flavor protection in West Carrollton Genuine Vegetable Parchment makes it the perfect material for wrapping all moist foods. In addition to its protection it is TASTELESS, ODORLESS, GREASE RESISTANT and INSOLUBLE. We can design your label and print it with one or more attractive colors (with special inks) all in our own plant.

WEST CARROLLTON PARCHMENT COMPANY

WEST CARROLLTON, OHIO

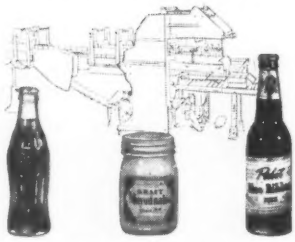
WHEN YOU *Must* REDUCE COSTS — USE

STANDARD-KNAPP PACKAGING MACHINES

WHEN YOU'VE got to buckle down, when you've got to make every minute and every motion on your production line pay off, you can't afford ordinarily efficient equipment — you need Standard-Knapp packaging machinery.

Whether you require just one machine, or a complete new packaging line . . . whether you use cans, bottles, or cartons . . . Standard-Knapp engineering and design experience assure cost-reducing efficiency for every packaging operation.

UNLOADERS

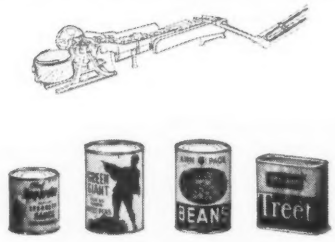


Remove glass containers from carton and place them in single file — or feed them into soakers and washers.

WASHERS

Provide fast, continuous delivery of washed new glass containers, without thermal shock.

UNSCRAMBLERS

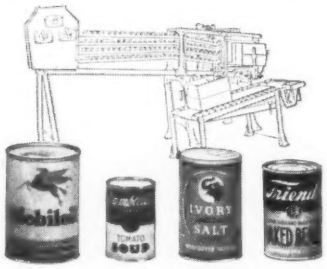


Rapidly arrange cans dumped from crates in single file at operating economies that quickly pay for machines.

LABELERS

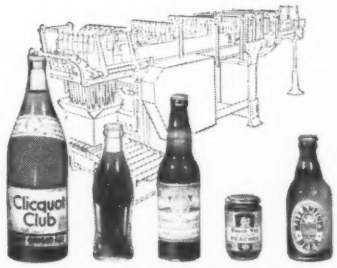
Apply labels with speed and precision, to afford good package appearance at minimum cost.

CAN PACKERS



Place cans quickly and gently into shipping cases in a smooth, cost-saving operating sequence.

BOTTLE PACKERS



Automatically pack bottles into trays or cases, and pay for themselves in efficiency.

CARTON PACKERS

Automatically pack cartons of all sizes and shapes into display or shipping cases with maximum speed and economy.

GLUERS AND SEALERS

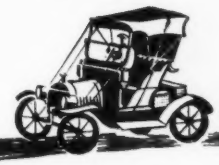
Apply glue to the carton or shipping case, not to the contents; insure strength with neat, economical sealing.

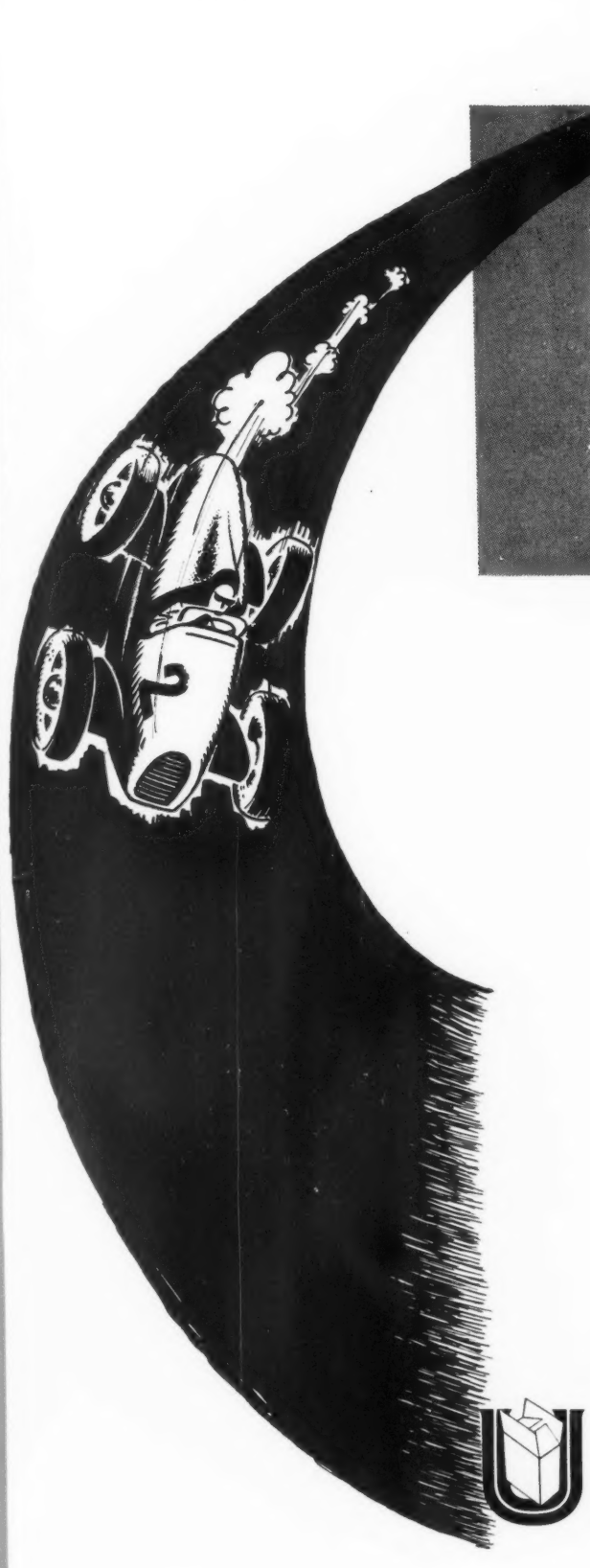
STANDARD-KNAPP

DIVISION OF HARTFORD-EMPIRE COMPANY

PORTLAND, CONN.

PUTS MOTION INTO YOUR PACKAGE





FOIL CARTONS

speed up your sales!

Foil Cartons sell your product faster. Why? Because while ordinary boxes remain static on shelves and counters, Foil is a moving, attention-getting display. Convince yourself. Walk past a foil package and see how the reflected highlights and shadows on its glittering surface give a strong feeling of movement. See how this play of light draws the eye and holds attention. Movement, the key to eye-catching displays and faster sales may be yours if you put your product into Foil Cartons. Send us your present package for suggestions.

UNITED BOARD AND CARTON *Corporation*

P. O. Box 1318 · Syracuse, New York

Board Mills:
Lockport, N. Y.; Thomson, N. Y.; Urbana, O.

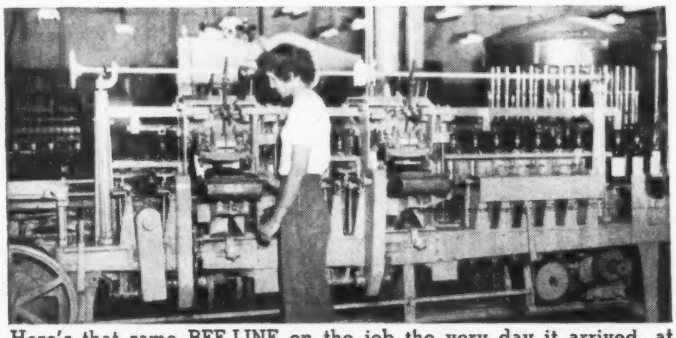
Carton Plants:
Victory Mills, N. Y.; Syracuse, N. Y.; Brooklyn, N. Y.; Cohoes, N. Y.; Springfield, O.

WORLD Labeler NEWS

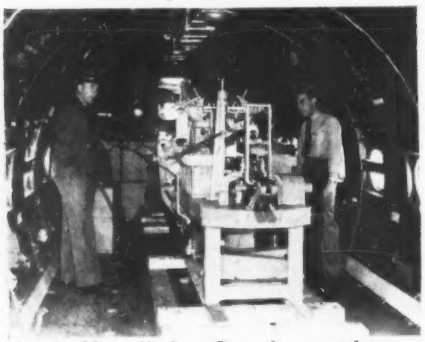
United Air Lines
Another World BEE-LINE Labeler!
Being Shipped Via: UNITED AIR LINES AIR FREIGHT
To: PETRI WINE CO.
AT STOCKTON, CALIFORNIA
"SPEEDING PETRI TO YOU"
6500 lbs.-LARGEST SINGLE PIECE EVER FLOWN FROM BOSTON

Petri of California wanted the best Labeler in the WORLD, and wanted it *quick* — so-o-o, here is a World Model 120 BEE-LINE Labeler via air freight — the largest single piece ever flown from Boston.

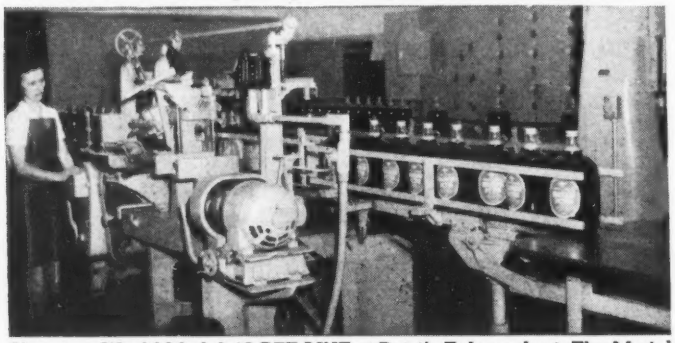
BEE-LINE gets ready to fly on a bee-line to California — a high production Labeler on its high speed way.



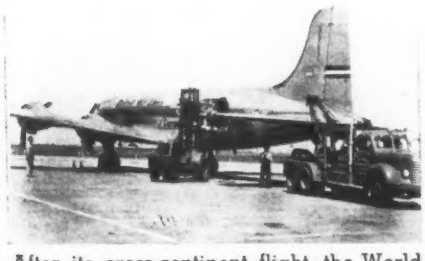
Here's that same BEE-LINE on the job the very day it arrived, at Petri's Escalon plant. Labels are neatly, firmly, precisely applied two-a-second. The Petri package is always worthy of the product.



Inside United's big Cargoliner with room to spare!



Here is a World Model 40 BEE-LINE at Petri's Tulare plant. The Model 40 is the BEE-LINE for gallon and half-gallon jugs or bottles.



After its cross-continent flight, the World BEE-LINE disembarks at Stockton, Cal.

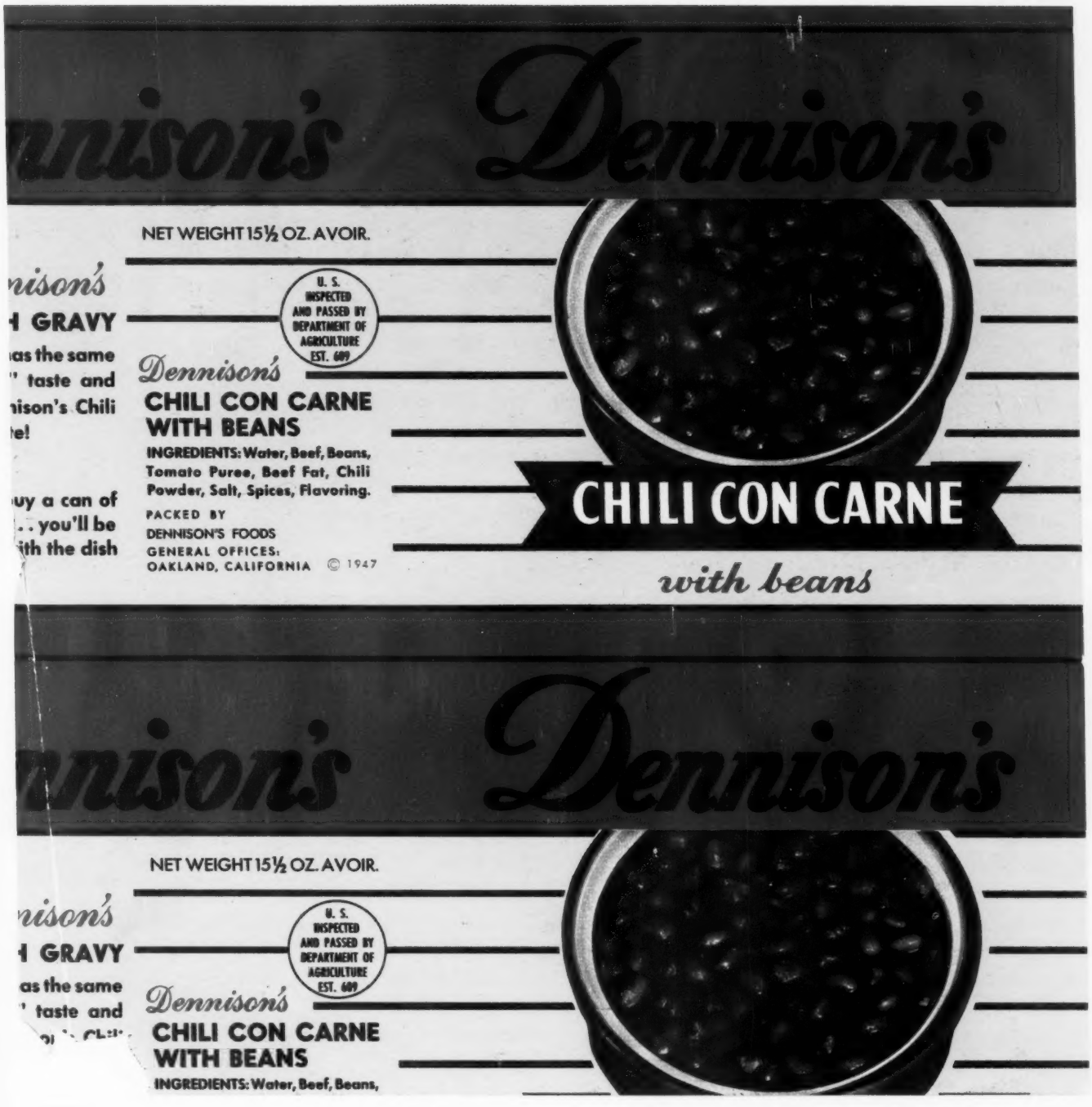
NEW BULLETIN contains complete information, specifications and floor plans of all BEE-LINE Labelers. May we mail you a copy?

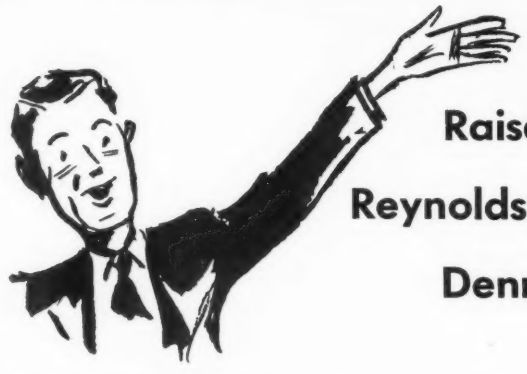
ECONOMIC MACHINERY COMPANY

Builders of World Automatic and Semi-Automatic Labelers for Every Purpose

WORCESTER, MASSACHUSETTS

New York Philadelphia Pittsburgh Chicago San Francisco Los Angeles Denver
Louisville Salt Lake City El Paso Seattle Portland Phoenix London Montreal
Toronto Winnipeg Newfoundland Vancouver Mexico City Sydney, Australia
Wellington, N.Z. San Juan, P.R. Ciudad Trujillo, D.R. Honolulu, T.H.


Dennison's
NET WEIGHT 15½ OZ. AVOIR.
U. S. INSPECTED AND PASSED BY DEPARTMENT OF AGRICULTURE EST. 689
Dennison's
CHILI CON CARNE WITH BEANS
INGREDIENTS: Water, Beef, Beans, Tomato Puree, Beef Fat, Chili Powder, Salt, Spices, Flavoring.
PACKED BY DENNISON'S FOODS GENERAL OFFICES: OAKLAND, CALIFORNIA © 1947
CHILI CON CARNE
with beans

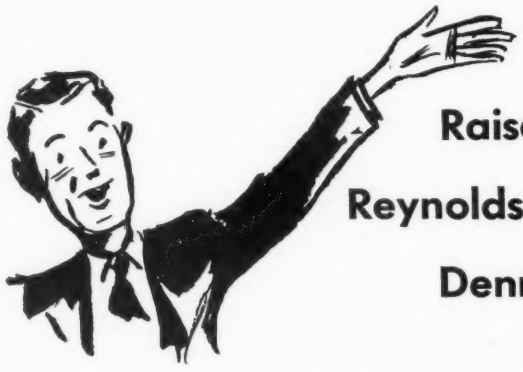


Raise this tip-on and see this Reynolds aluminum label in actual use on Dennison's Chile Con Carne

REYNOLDS METALS

REYNOLDS ALUMINUM

Dennison knows the sales power of brilliant display...wraps its Chile Con Carne in gleaming Reynolds Aluminum labels...attracts eyes of impulse shoppers—and their dollars. Whether you are primarily concerned with self-selling display or with maximum protection for your product, let us show you how Reynolds Aluminum packaging offers the ultimate in both. Reynolds Metals Company, Richmond 19, Virginia.



Raise this tip-on and see this Reynolds aluminum label in actual use on Dennison's Chile Con Carne

REYNOLDS METALS

REYNOLDS ALUMINUM

GET double protection WITH THIS top-side seal

When Alseco TopSide Seals are applied, controlled top pressure embeds the glass into the cap liner. A double seal is made . . . on the top . . . on the side. Then rollers move in and roll-on the threads. Away goes your product . . . vacuum sealed . . . securely sealed. Customers get not only all the original quality; they have a bottle that is finger tip easy to open and reclose.

"Tailor-Made" To Fit Each Bottle

Under controlled pressure, the unthreaded cap is held down tightly on the glass, embedding the bottle lip into the liner, effecting a top and side seal.

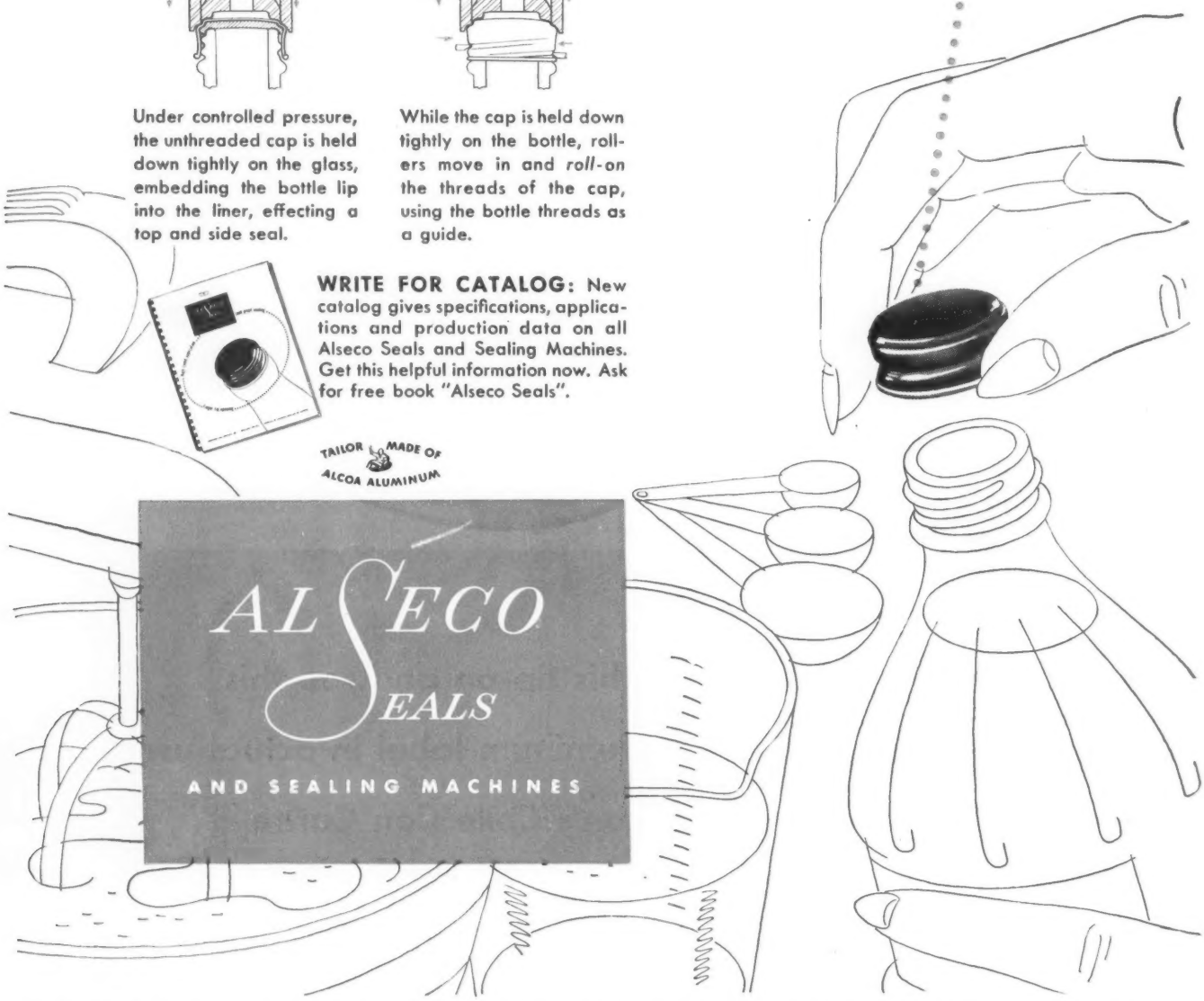
While the cap is held down tightly on the bottle, rollers move in and *roll*-on the threads of the cap, using the bottle threads as a guide.

WRITE FOR CATALOG: New catalog gives specifications, applications and production data on all Alseco Seals and Sealing Machines. Get this helpful information now. Ask for free book "Alseco Seals".

TAILOR MADE OF ALCOA ALUMINUM

ALSECO SEALS

AND SEALING MACHINES



ALUMINUM SEAL COMPANY, INC. • RICHMOND, INDIANA • SUBSIDIARY OF ALUMINUM COMPANY OF AMERICA

KIDDER POINTERS

No. 22.

Observations of trends and indications in packaging... noted by the manufacturers of Kidder "3 Point" Presses, Kidder Press Company, Inc., Dover, N. H.

Carbonated drinks are now marketed in the form of tablets. Dropping a pellet in a glass of ice water will give you one of "six delicious flavors". The package does double duty. It's a bottle with a plastic top and colorful label which converts to an attractive salt or pepper shaker when empty.

A Cincinnati meat packer proved the value of good packaging when he put his bacon in a solid, opaque container of attractive design with quality printing job . . . boosted the price two cents into the 80¢ bracket . . . and found his sales jumped 25% in the face of a declining bacon market and chain store competition selling at 49¢!

If you want to start a Cellophane factory, DuPont will let you use its patents free and will loan you engineers and key production men to get you started, says Packaging Parade for February 1949. In an effort to avoid the charge of "monopoly" (DuPont makes 75% of all Cellophane now) the company wants to help generate competition in the field.

A new pressure-sensitive paper tape strong enough to compete with rope or metal strapping in heavy duty packaging applications is now on the market. Tensile strength is 180 lbs. per inch of width. One of the latest of the "scotch" types, it requires no dispenser or machine . . . can be used directly by hand wrapping.

Package Readership has now been found to be important in self-service selling. First we worried only about advertising readership . . . now it seems the package has to rate high readership, too! Designers should consider this factor especially for labels, says an item in Food Field Reporter for February 28, 1949.

Cranberries are now being marketed in folding cartons with windows . . . as opposed to "bulk" sales or Cellophane bag sales previously used. Box is attractive, "saleable" and designed for easy filling at packing plant. Display possibilities are very good with this new method.

A California dairy has transformed its cardboard milk containers into a complete line of model trains. Colorful railroad train replicas are printed on the sides and easy arrangements made to link the containers together. The innovation has created quite a stir.

85% of tomatoes are now sold pre-packed at retail, says Mrs. B. Robertson, package specialist for the U. S. Dept. of Agriculture.

If you're interested in a survey called "Outlook For The Packaging Industry" . . . a very complete discussion with charts and graphs is yours in the February 1949 issue of Packaging Parade.

A new glazed paper called "Ferro-Glazed" paper having a high lustre and very smooth, level surface has been placed on the market. Said to be exceptionally suitable for labels and box wraps, it is priced substantially lower than flint. Currently available in 30 and 34 pound stock and in several shades of white.

Vinyl-nitrile film, a relatively new plastic development, has been found perfect for direct contact with foods. It does not affect the taste or odor of any food, is strong, elastic, grease-proof . . . readily heat-scalable and chemically inert. It takes a good printing job and is presently used in oleomargarine mixing bags, meat and cheese wrappings.

A new hand operated label gummer which takes labels up to 16" wide and which can be used anywhere there is an electric light socket, is especially good for stop-and-go production. Clean-up time is said to be 90% faster than for other labelers. One machine can be used by 2 labelers.

KIDDER PRESS COMPANY, INC., ***Printing Machinery,*** **Dover, N. H.**

WRAPPER ACHIEVEMENT OF THE MONTH

Quality of printing reflects quality of product in these outstanding Cellophane jobs. The rich red, blue and green of the tomato wrapper . . . the red, white and blue of the popcorn container and the dignity of the blue, white and gold athletic goods container . . . all cleanly, clearly impressed, lend an unmistakable feeling of quality to the products they protect.

The press: A Kidder 42″ Aniliner. Combining good rubber plates with high quality inks, a superb printing achievement is here credited to:

PACKAGING PRODUCTS, INC.
Kansas City, Missouri

"QUALITY OF PRINTING IS ESSENTIAL TO CONTINUING SUCCESS"

This paraphrase of a well-known advertising slogan is just as true for *printing* as it is for cigarettes . . . or any other product. In these days when people *do* judge things by their wrappers or containers, a great load is placed on the printing industry to turn out attractive labels, packages, wraps, and other printing jobs that give the consumer his first impression of a product. A *good* impression will often lead to a sale . . . a *poor* impression means complete, often permanent rejection before the *product* is even given a trial!

And here's where Kidder Presses back you up . . . they're designed to combine the three essentials of good printing: *Control over the paper, proper distribution of ink* and *accuracy of the impression.*

These features are yours in:

The two new Kidder designs of MULTI-COLOR INTERCHANGEABLE CYLINDER OIL PRESSES... for metal or rubber plates.

KIDDER ANILINE-TYPE PRESSES — the famous Aniliners — for high-speed — high-quality runs . . . including the narrow "Cello-Printer", primarily for Cellophane, and the new "PRINT-MASTER" Aniliner offering the ultimate in aniline press speed and quality.

CONTROL OVER THE PAPER

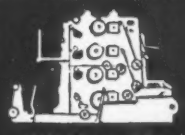
PROPER DISTRIBUTION OF INK

ACCURACY OF THE IMPRESSION

KIDDER
THREE POINT
PRESS

KIDDER

Manufacturer of "3 Point" Presses—so-called because they fulfill the three major requirements for perfect printing.

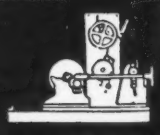


MULTI-COLOR LETTER PRESSES

for waxed paper, box wrappers, etc., rewound or sheet-delivered — up to 72 inches in width.

"ANILINER" and "CELLOPRINTER" MULTI-COLOR PRESSES

with gravure units — for decorative papers, cellophane, glassine, etc., — up to 65 inches in width.



SLITTERS AND REWINDERS

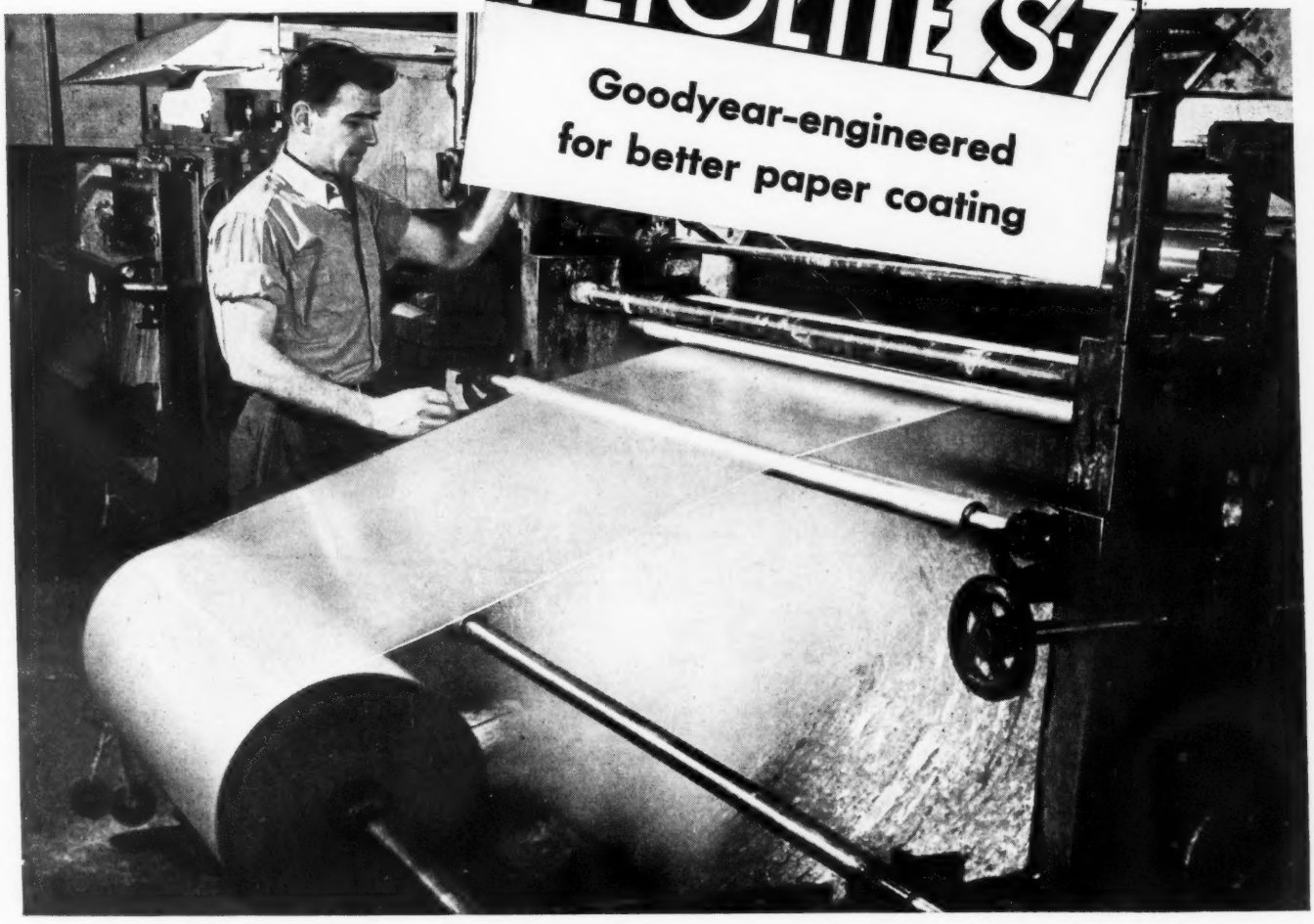
for paper mills, finishing rooms, and converting plants — up to 115 inches in width.

Announcing

PLIOLITE S-7

Goodyear-engineered for better paper coating

Coating glassine paper with **Pliolite S-7**



LATEST addition to the **Pliolite** line of use-proved products is **Pliolite S-7** — Goodyear's engineered thermoplastic hydrocarbon copolymer for coating of papers. **Pliolite S-7** can be easily formulated to your particular needs — gives coatings with excellent resistance to passage of water vapor, strong heat seals, excellent crease resistance, good "slip," non-blocking characteristics and superior ability to "anchor" to a wide variety of stocks.

Pliolite S-7 is soluble in a range of common solvents—lets you formulate a paper coating of any desired drying rate or viscosity. It can be modified easily with a variety of resins or waxes in order to develop a specific property in your paper. And **Pliolite S-7** coatings are not affected by aging.

Pliolite S-7 is available in two forms — **Pliolite S-7-30,** a simple 30% solution in toluene, and **Pliolite S-7** Coating 1000-F-30 (PC-1000-F-30), an already compounded 30% solids solution in toluene. **Pliolite S-7-30** is the resin in a form for convenient modification and compounding; the other form is received ready for use. For samples and full details, write Goodyear, Chemical Division, Akron 16, Ohio.

USE PROVED *Products*

GOODYEAR

Pliolite—T.M. The Goodyear Tire & Rubber Company

PICKLE PACKERS PARADE

National Pickle Week

Prominently Promotes Pickle

Packers' Products.

H-A Glass Containers, Practical

and Productionwise, Protect and

Promote Pickle Packers'

Products every day Providing

Pickle Packers' Profits.

HAZEL-ATLAS GLASS COMPANY

WHEELING, WEST VIRGINIA

Easy to STORE
Easy to POUR

AVAILABLE IN SIZES FROM 2 TO 25 LBS.

DELTASEAL: Reg. U.S. Pat. Off.

TWO FEATURES THAT MAKE SALES FOR FOODS IN

Bemis Deltaseal Bags

This attractive, low-cost package not only gives sales-inviting display in stores, but also helps keep customers sold on your brand after they're home.

Women like Deltaseal Bags because the square-pack bag rests well on pantry shelves, and the Deltaseal spout makes it easy to pour direct from the bag without spilling.

Your Bemis representative will be glad to show you how Deltaseal Bags and the Deltaseal Packaging System can help you increase food sales. Get in touch with him now.

COTTON · BURLAP · PAPER BAGS · ESTABLISHED 1858 · BEMIS BRO BAG COMPANY

Bemis

"America's No. 1 Bag Maker"

Baltimore • Boise • Boston • Brooklyn • Buffalo • Charlotte • Chicago • Cleveland • Denver • Detroit • East Pepperell • Houston • Indianapolis • Jacksonville, Fla. • Louisville Kansas City • Los Angeles • Memphis • Minneapolis • Mobile • New Orleans • New York City • Norfolk • Oklahoma City • Omaha • Peoria • Phoenix • Pittsburgh Salina • St. Louis • Salt Lake City • San Francisco • Seattle • Wichita • Vancouver, Wash. • Wilmington, Calif.

TUPPER!

TUPPER

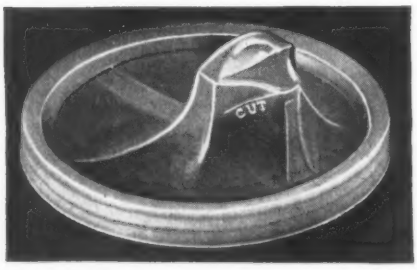
This smart breakfast-table setting having appeared as illustrating the "Housewares Award" — winning plastic tableware, in exhibits and publications in the United States, Canada, England, France, Belgium, the Netherlands and Luxembourg is again printed here as visual substantiation of the leadership of Tupper products.

TUPPER Seals

air and liquid-tight, flexible covers for Tupperware Tumblers, Canisters, Wonder Bowls, Cereal Bowls and many another container of glass, metal and pottery, the contents of which it is desired to keep fresh and wholesome.

Here is where TUPPER Por-Top started.

TUPPER Por-Top



To the thoughtful designing and planning that makes Tupper Seal flexible, air and liquid-tight covers hug the rim of the container to which they are applied in an embrace that makes of that receptacle a virtually hermetically-sealed container, mature consideration and meticulous care developed the graceful non-drip spout that actually prevents dripping down the sides of the container. It takes your product from the refrigerator or pantry shelf right onto the dining table.

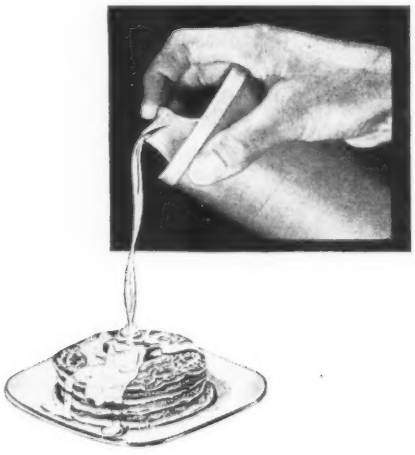
To do things better

Leadership imposes many penalties, not least of which is the stern necessity for exercising deliberation . . . mature consideration, in the development of all ideas before presenting them to the consideration of others.

During such periods of deliberation, careful consideration and meticulous planning, it frequently happens that the more impetuous and less conscientious plunge headlong to their own and the buyers very great disillusionment.

As Tupper Por-Top cover is presented, it embodies all the attributes with which leadership is identified and so, it may occupy a position well up in the contemplation of those considering augmenting the "buy appeal" of their own fine products through association with another.

As an initial closure or as an auxiliary cover for use in preserving surplus contents once container has been opened TUPPER Por-Top, specifically engineered to your container may well become just that extra "buy appeal" for stimulating sales volume most satisfactorily.



TUPPER CORPORATION

Manufacturers of better plastic — CONSUMER, INDUSTRIAL, PACKAGING AND SCIENTIFIC PRODUCTS

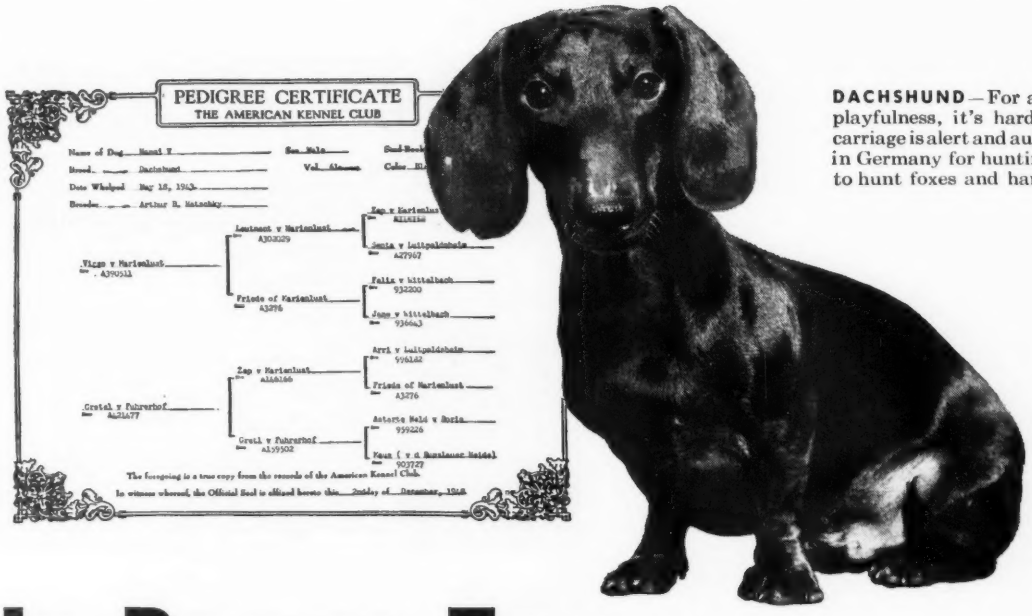
FACTORIES: Farnumsville, Mass., and Cuero, Texas — New York Show Rooms 225 Fifth Ave.

ADDRESS ALL COMMUNICATIONS TO: Development Department A, CUERO, TEXAS

Do not buy Plastic Products just as a substitute for something else. *Do buy them because they do so many jobs so much better.*

COPYRIGHT TUPPER CORPORATION 1949

A Pedigree is a Promise of Quality



DACHSHUND—For affection, responsiveness and playfulness, it's hard to beat a dachshund. His carriage is alert and audacious. Originally developed in Germany for hunting badger, he can be trained to hunt foxes and hare, and track wounded deer.

In Boxes, Too . . . . .

MAKERS of famous national brand products look for consistent quality, consistent service and fair price from their box suppliers. That's why Colgate-Palmolive-Peet ship Vel, the household detergent used by countless housewives, in Union Corrugated Containers . . . the boxes with a pedigree.

75 years of leadership in flexible packaging goes into Union boxes. Every step in the making, from timber to finished box, is quality-controlled by one management in America's largest pulp-to-container plant.

Tremendous forest resources, four modern box plants and five of the nine largest paper machines in the world make Union a dependable container source for any large volume shipper.

That's why, every month, more makers of famous brand products ship in Union boxes.

UNION Corrugated Containers

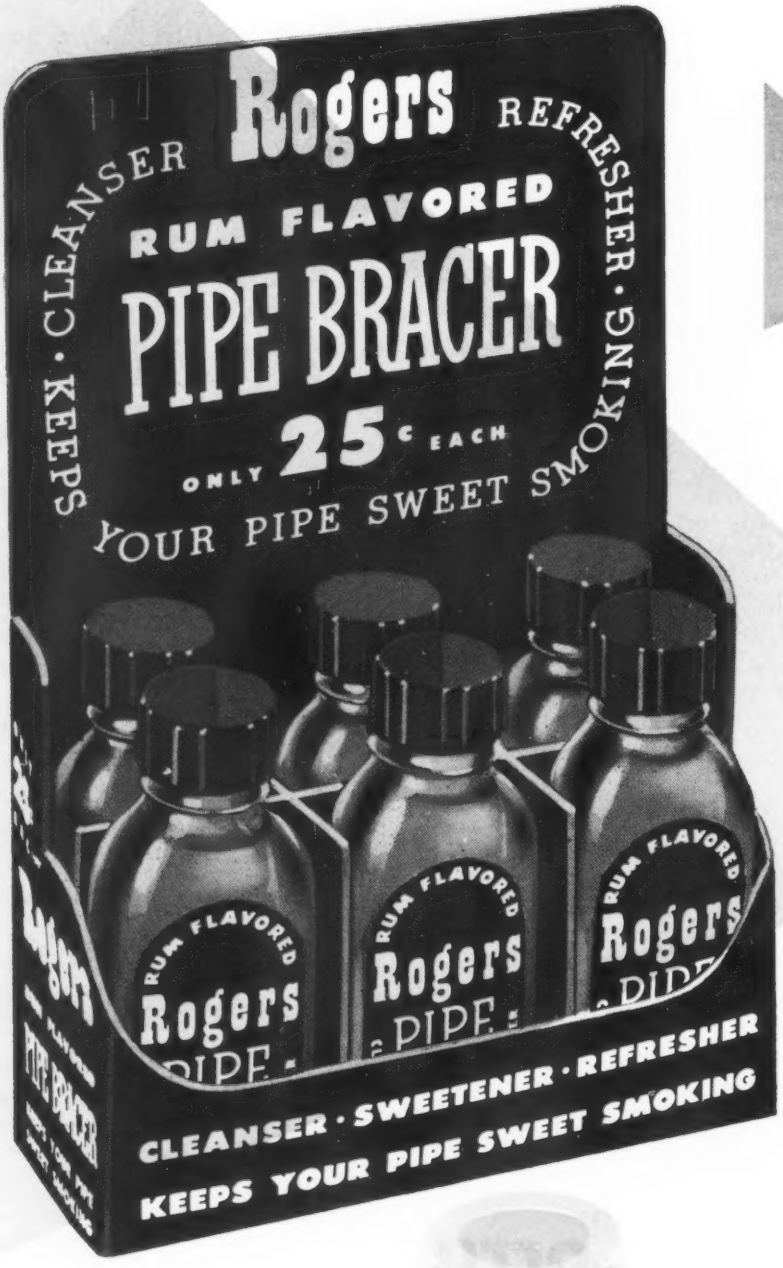
UNION BAG & Paper Corporation

Principal Offices: WOOLWORTH BLDG., NEW YORK 7, N. Y.

Corrugated Container Plants: SAVANNAH, GEORGIA • CHICAGO, ILLINOIS • TRENTON, NEW JERSEY

Another Example

of Gardner-Richardson Packaging Ingenuity . . .



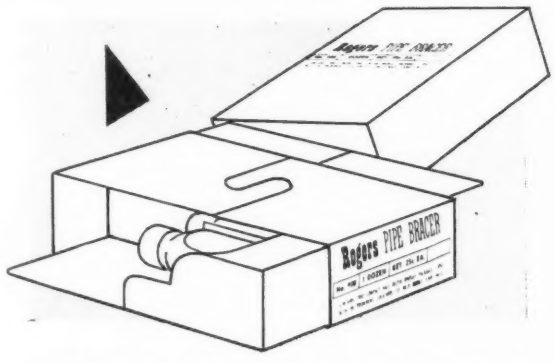
The Rogers Pipe Bracer

"Double Feature" Display

IT INCREASED PIPE SWEETENER SALES 35% —WITH NO SPECIAL PROMOTION!

How's *this* for a dramatic story of modern packaging? A 35% increase in sales! A 70% decrease in packaging time! It began when Rogers Imports, Inc. asked Gardner-Richardson for a shipping-display carton to hold 12 bottles of Rogers Pipe Bracer.

Instead of a 12-bottle display, our designers came up with a combination package—*two* 6-bottle display units slipped into a shipping sleeve. Easy to pack and assemble (packaging time was reduced 70%), these smaller, more compact displays also found it easier to get preferred front-of-counter space in crowded tobacco stores.



Two display units fit together for safe, easy shipping. The dealer has nothing to set up—he just slips the displays from the shipping sleeve, and puts them on his counter!

Busy dealers found nothing to fold, no dividers to remove, no "easy instructions" to puzzle over. They simply set them on their counters.

The displays did the rest. Without any special promotion or extra sales effort, Rogers Pipe Bracer sales jumped 35%.

Maybe We Can Increase "Impulse" Sales For You

If you have a product that needs an extra point-of-sale push, a product that's hard to package, or a new idea that needs a new packaging idea, get in touch with Gardner-Richardson. We'll be glad to tackle it. No obligation, of course.

MAKE MORE EYES REACH FOR YOUR PRODUCT IN CARTONS OF COATED LITHWITE*

Rogers Imports, Inc., like so many seasoned merchandisers, gets extra "impulse" sales from the extra eye-appeal of *Coated* Lithwite, the quality clay-coated board that's whiter . . . brighter. Colors hold up brilliantly on *Coated* Lithwite . . . pictures reproduce with true-to-life realism. Rub-resisting. Fade-resisting. For a practical way to upgrade your cartons, investigate *Coated* Lithwite.

THE GARDNER-RICHARDSON CO.

Manufacturers of Folding Cartons and Boxboard, Middletown, Ohio

SALES REPRESENTATIVES IN BOSTON, CHICAGO, CLEVELAND, DETROIT, NEW YORK, PHILADELPHIA, PITTSBURGH, ST. LOUIS

*Reg. U. S. Pat. Office.

The Right Combination for GOOD CELLOPHANE PRINTING

BBD EXCELLOPAKE ANILINE INK

BBD Specialized TECHNICAL SERVICE

Aniline-Process Printed with BBD EXCELLOPAKE INKS by CRYSTAL TRANSPARENT CORP., New York, and CRYSTAL TUBE CORP., Chicago

Brilliant printing results on cellophane are easy to get when you use this famous BBD combination . . .

EXCELLOPAKE INK An opaque, 100% pigmented ink that affords dense, even coverage of solids . . . clean, sharp printing of fine type . . . long mileage. Flexible . . . light-fast . . . non-bleeding. Available in full range of rich, sparkling standard colors . . . or special shades "tailor-made" to your specifications.

TECHNICAL SERVICE BBD representatives are aniline printing specialists with "shirt-sleeve" experience in package production. They can show you how to step up printing quality . . . *economically.*

Rely on BBD for inks to suit your purpose . . . "know-how" to solve your problems. Why not contact your nearest BBD office today.

Bensing Bros. and Deeney

LARGEST MANUFACTURERS OF ANILINE INK IN THE WORLD

401 N. BROAD STREET, PHILADELPHIA 8, PA.

Distributors: Manton Brothers, Elizabeth Street, Toronto, Canada; A. M. Bojanower, 5270 E. Washington Blvd., Los Angeles 22, Calif.;
Export Division: McLaurin-Jones Co. 22 E. 41st Street, New York 17, N. Y.
Associated Manufacturing Plants: 81 Albion Street, Wakefield, Mass.; 2358 N. Seeley Avenue, Chicago 47, Ill.

The new specially designed nozzle of the WIRZ grease-tip tube prevents grease "backfiring," cuts lubricant losses. Tapered and long enough for practically every type outboard motor, the nozzle fits snugly into lower unit diameter openings from 19/64" to 13/32" . . . reduces the inconveniences of the lubricating job. WIRZ grease-tip tube has met instant approval everywhere.

Among the leading manufacturers who have adopted the new WIRZ grease-tip tube are Texaco, Dixon, Evinrude, Johnson, Socony-Vacuum, Whiz, etc.

If you want to increase the speed, economy and convenience of your product-in-use, it will pay you to try WIRZ collapsible metal tubes. The grease-tip tube is one of many practical tube designs for a specific purpose produced by WIRZ in the consumer and industrial fields since WIRZ made the first tubes in America back in 1872. Write today for samples and recommendations.

ESTABLISHED 1836
A. H. WIRZ Inc.

Fourth & Cole Sts. CHESTER, PA.

New York 17, N. Y. 50 E. 42nd St.	Chicago 4, Ill. 80 E. Jackson Blvd.	Memphis 2, Tenn. Wurzburg Bros.	Havana, Cuba Roberto Ortiz Planos	A. G. Spilker Los Angeles 14, Calif. 1709 W. 8th St., Exposition 0178	Export Division—755 Drexel Bldg., Philadelphia 6, Pa.

Collapsible Metal Tubes • Lacquer Linings • Wax Linings • Westite Closures • Soft Metal Tubing • Household Can Spouts • Applicator Pipes • Compression Molding

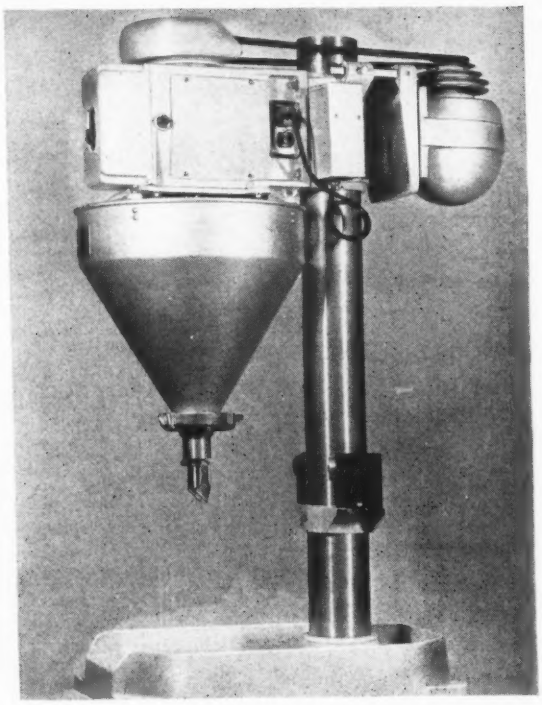
IT TAKES JUST 5 MINUTES

...to clean
...to sterilize
...to re-assemble

THE MATEER ELECTRIC FILLER

Fills dry, wet and viscous materials with extreme accuracy

- **No long tests needed for proper adjustment**
- **Manual or fully automatic cycling with any interval**
- **Fills from 50 mg. (2½ cc.) to 2 pounds**
- **20 to 70 fills per minute**
- **Chrome, aluminum and baked enamel finish**



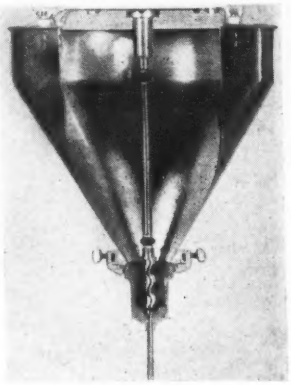
Suitable for production line, small lot and laboratory operation. Both material and working parts fully protected from each other. Portable.

Based on an entirely new recycling principle which enables you to achieve faster, more accurate fills, the Mateer Electric Filler is easy to set-up for production runs, simpler than any other filler to clean, *sterilize* and change over to other materials.

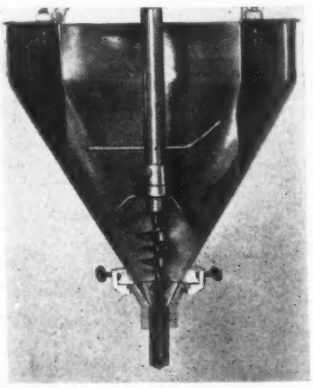
Throughout, the Mateer Electric Filler has been designed for ease in cleaning. The hopper, the chrome shaft, augers, and rotors are quickly demountable. You can wipe even tacky materials from the baked enamel finish. What is more, *every* part of the Mateer Filler which contacts the material being filled or the container can be sterilized *in less than five minutes.* Approved conditions of sterility can be maintained.

There's no practical limit to the Mateer Filler's flexibility. The augers, the rotors, and the agitators, are specially designed to provide positive, accurate feed. The augers and rotors, which are interchangeable, operate on a shaft whose cycling is regulated by a synchronous counter. Shaft speeds, adjustable from 450 to 900 rpm, enable the Mateer Filler to fill just about any powder, granular, liquid or viscous product with consistent accuracy (as accurate as ±1% for many products).

For actual performance figures of the Mateer Electric Filler with a particular product, we suggest you send us a sample. We'll forward full test data and complete operating details by return mail. *Write now!* or call Berwyn 0700.



Rotor used for filling liquids and viscous materials.



Auger used for filling dry powders.

G. DIEHL MATEER & CO.

LINCOLN HIGHWAY · DEVON, PENNSYLVANIA

The myriad stars of the firmament suggest the tremendous volume of folding boxes which Warnercraft can produce with their new plant facilities. Each Warnercraft package is designed to *win friends* for your product through its *airy, genial* appearance. Be *alert* . . . *stimulate* sales . . . Avail yourself of stellar packaging in volume . . . Let Warnercraft put your merchandise "AMONG THE STARS."

W
WARNERCRAFT®
Finest Name in Packaging
THE WARNER BROTHERS COMPANY

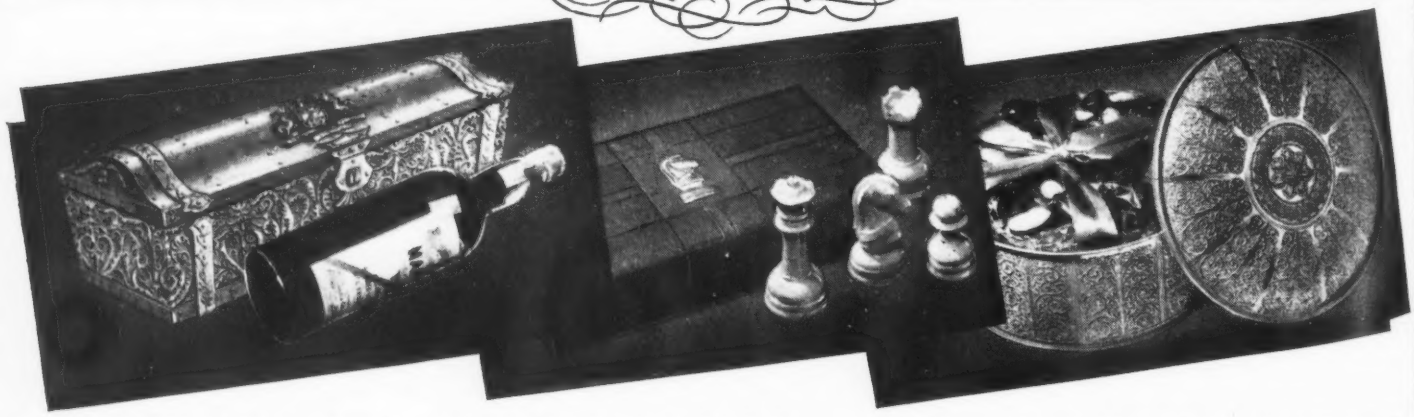
Makers of set-up and folding boxes of all types — transparent acetate containers . . . hand made specialties . . . counter displays and dispensers.
Main Office and Factory: 325 Lafayette Street, Bridgeport 1, Conn. • New York Sales Office: 200 Madison Avenue, New York 16, N. Y.

Your Product-too...

...CAN BE MADE A SUCCESSFUL HOLIDAY GIFT PROMOTION...

XTRA DOLLAR-VALUE ★ PRESTIGE BUILDING ★ GOODWILL ADVERTISING

BEAUTIFUL RE-USE *Guildcraft* GIFT CONTAINERS..



FREDERICK A. KRAUSE AND ASSOCIATES

NEW YORK CITY • FRENCHTOWN, NEW JERSEY • CHICAGO, ILLINOIS

Before you package it TALK TO RITCHIE . . . 83 years of packaging KNOW HOW

To Get More Jobber & Dealer P-U-S-H Promote YOUR Product with a...

Package by Ritchie

By the Thousands or Millions . . .

SHIPPED ON SCHEDULE

Makers of many of America's best known products use set-up paper boxes, transparent packages or fibre cans *by Ritchie*. Because—Ritchie's 83 years of packaging *know how* assures top quality. It *guarantees* the better design, construction, economical production and *deliveries on schedule*, vital to top-flight merchandising of mass-produced products. Talk to a Ritchie man next time you consider a package source. Ritchie men *know* packages.

Design:

If you seek a package that will better *identify* your product—an eye-catching, eye-appealing, *selling* package—one that will win jobber and dealer enthusiasm—Ritchie can supply you with that kind of package—in *any* quantity.

Construction:

Ritchie-made packages are *practical*—planned for production *at low unit cost* Constructed to protect and/or conveniently dispense your product. Easy to fill or pack—to handle, stack and display In short, a BETTER PACKAGE

Production:

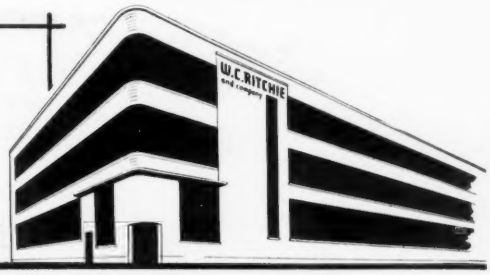
With specially designed, high speed labor-saving equipment—Ritchie functions as an arm of your own production line—delivers your package requirements ON SCHEDULE—even during your seasonal peaks. (*Ritchie's annual package capacity over a billion units.*)

• • •

Talk to a Ritchie Man—always at your service. Or send us your present package for suggestions. Let Ritchie help you develop a better package at low unit cost. No obligation.

SET-UP PAPER BOXES
TRANSPARENT PACKAGES
FIBRE CANS

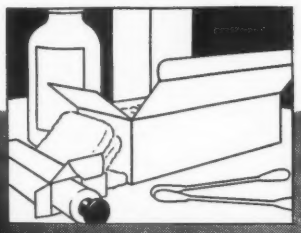
8841 BALTIMORE AVE.
CHICAGO 17



Packaging for the Leaders since 1866

NEW YORK • DETROIT • LOS ANGELES • ST LOUIS • DENVER
PROVIDENCE • CLEVELAND • CHARLOTTE • JACKSONVILLE • DALLAS

In Baby-Care Products, For Instance



THE CLAY-COATED BOX BOARD THAT'S CUSTOM-MADE FOR EVERY ORDER

Quality Products Demand Quality Packaging...

Uniform, Color-True, Clean-Surfaced Ridgelo

Where intangibles play so great a part in consumer confidence, such as in baby-care products, the package is a symbol of the integrity of the maker. From nursing nipples to swab sticks, baby-care products packaged in Ridgelo cartons reflect the high standards of their manufacturers.

Whatever your product, you'll find Ridgelo an effective aid to packaging efficiency. Since every order is made to individual printing and filling requirements, Ridgelo assures you of cartons exactly tailored to *your* needs, specifically designed for *you* in every detail.

Ridgelo's uniformity is guaranteed you through a precise, controlled, sample-matching system. Even in years' old reorders, this virtually eliminates any risk of variation. Perfectly sized surfaces mean clearer, brighter printing . . . while integrated pigments and light-resistant finishes *preserve* the fresh appearance of your packages.

Ridgelo keeps packaging costs to a practical minimum, while simultaneously maintaining its reputation for the finest box board made. When quality is the buy-word in maintaining sales leadership, you can rely on Ridgelo.

MADE AT RIDGEFIELD, N. J.
BY LOWE PAPER COMPANY

REPRESENTATIVES

H. B. Royce, Detroit • Philip Rudolph & Sons, Inc., Philadelphia
A. E. Kellog, St. Louis • Norman A. Buist, Los Angeles

Beauty makes Sales

FOR CROMWELL WATCH BANDS

Cases of

Koppers Polystyrene

will make sales for your products

■ This azure blue box of Koppers Polystyrene is a perfect partner for the Cromwell watch band. The blue sets off the gold and other precious metals of the bands. The tight fit of the box protects the contents from dust and tarnish. The box itself prevents customers from handling the bands and leaving unsightly finger prints.

Dealers, everywhere, are enthusiastic about display boxes of Koppers Polystyrene. It comes with the crystal clarity of fine glass or in any desired color to enhance the beauty of the product.

With careful design the boxes can be made tight and dust-proof. Transparent covers permit full view of the product and discourage handling. Correct interior design holds the product at the right angle.

Saves money, too. With all its attractiveness, Koppers Polystyrene is not expensive. It is the lowest in cost of all thermoplastic molding materials — and its light weight brings considerable reduction in shipping costs. Send the handy coupon for our new booklet on Koppers Plastics.

KOPPERS COMPANY, INC.

Chemical Division **Pittsburgh 19, Pa.**

■ Lord Cromwell watch band in azure blue case of Koppers Polystyrene. The case was molded by Progressive Plastics Manufacturing Company, Brooklyn, N. Y.

KOPPERS

Koppers *Perfected* Plastics

•POLYSTYRENE •ETHYL CELLULOSE •CELLULOSE ACETATE

SEND FOR FREE BOOKLET

Koppers Company, Inc.
Chemical Division MPG 5
Pittsburgh 19, Pa.

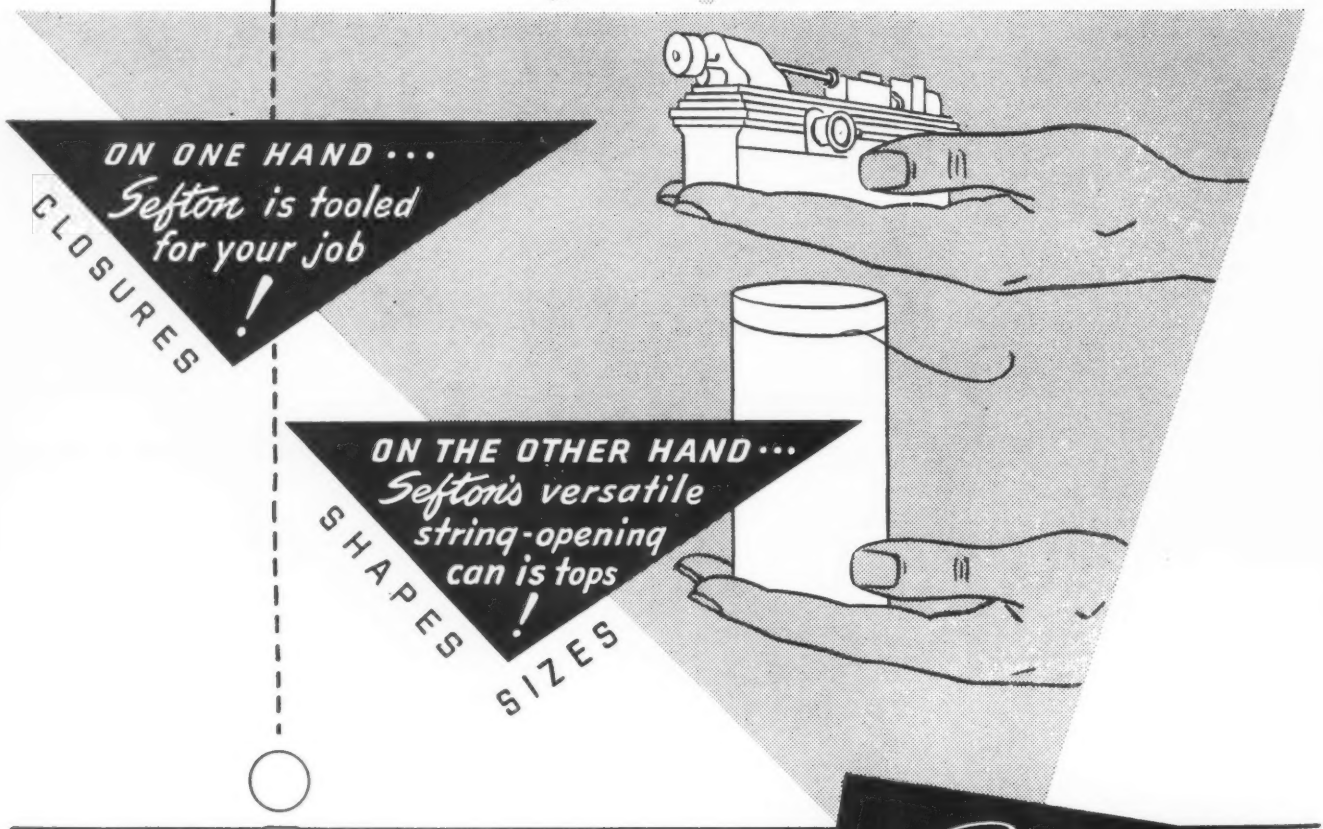
Please send me your new illustrated booklet on Koppers Plastics.

Name_____ Position_____

Company_____

Address_____

There are 2 SIDES to packaging problems... Let Sefton solve yours!

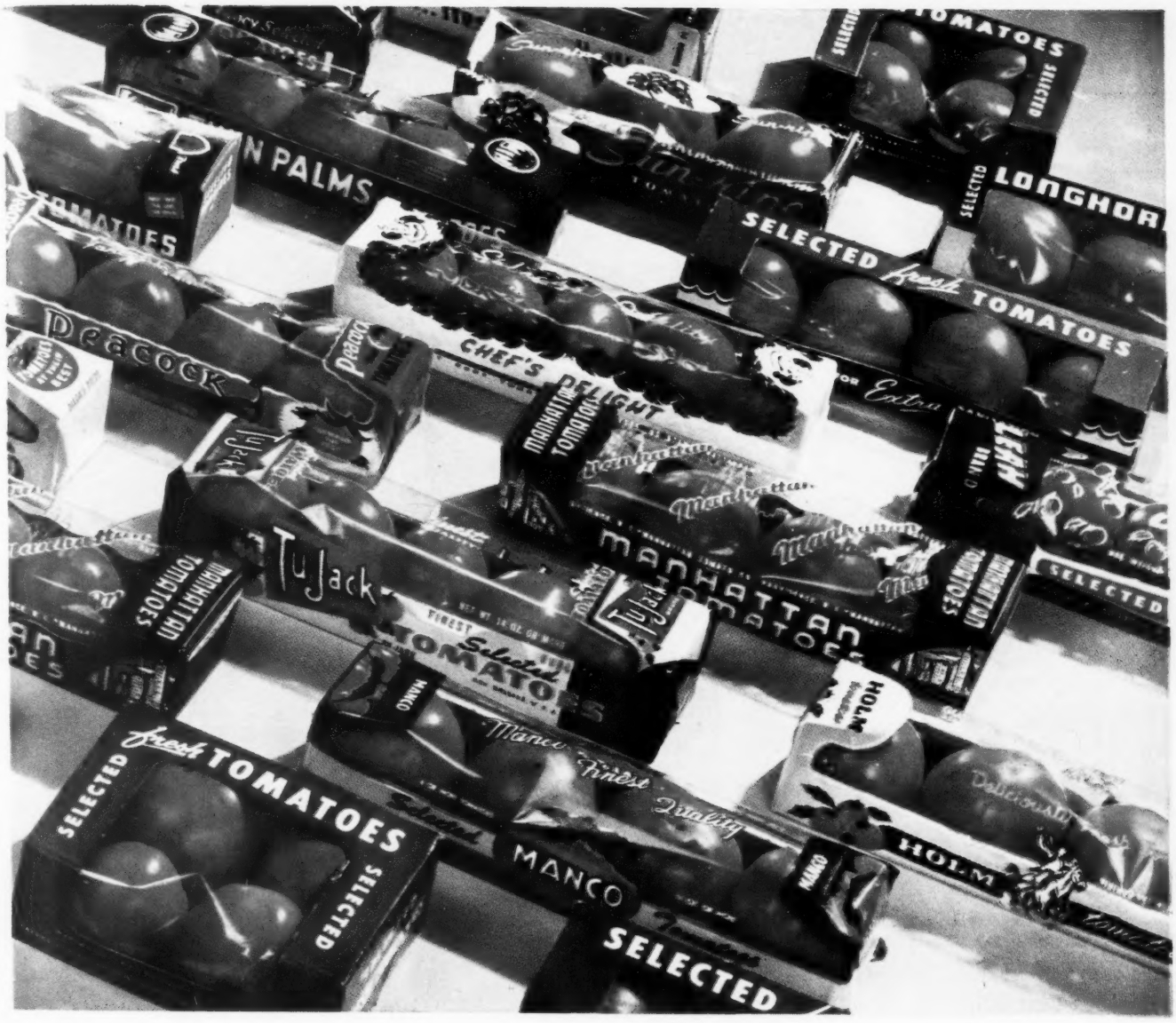


ALL STANDARD OPENINGS AND RECLOSURES
Spiral and Convolute
Paper and Metal Ends
Round and Irregular Shapes
Cans, Tubes and Heavy Cores

● Primarily, when planning your packages, you should choose a company that's equipped to do your specific job... like Sefton! In the second place, Sefton offers the versatile string-opening that is easy to fill, is factory-sealed, tamper-proof and simple to close again.

Sefton
FIBRE CAN COMPANY
ST. LOUIS . . . . . NEW ORLEANS
DIVISION OF CONTAINER CORP. OF AMERICA

DISTRICT OFFICES: ● Los Angeles ● Salt Lake City ● Denver ● Dallas ● Chicago ● Cincinnatti ● New Orleans ● Boston ● Detroit ● New York ● St. Paul ● Cleveland ● Memphis ● Nashville ● Seattle ● Portland



Tomatoes... PREPACKAGING'S EXHIBIT #1

From Maine to California the best tomatoes are packaged in Lumarith* transparent film. This crystal clear, non-fogging film is a *natural* for prepackaging fresh foods. It is water and grease-proof, yet it is a real "breathing" wrap—permitting the exchange of carbon dioxide for fresh oxygen, thus helping to preserve freshness and flavor in the food it protects.

What are your packaging plans . . . fresh foods, soft goods, pharmaceuticals, candy or cosmetics? If they include printed wraps, window boxes, transparent rigids or combinations, they should include Lumarith. Lumarith is uncoated, heat sealable and adaptable to both manual and machine wrapping. Your Celanese representative can direct you to convertors and box manufacturers who are experienced in the use of Lumarith transparent film. Celanese Corporation of America, Plastics Division, Dept. 8-E, 180 Madison Ave., New York 16, N. Y.

LUMARITH* TRANSPARENT FILM

A Celanese* PLASTIC

*Reg. U. S. Pat. Off.

Blue

STOPS *the* EYE...

STARTS *the* SALE

Introduce your new products or repackage your old ones in rich, royal, eye-stopping Maryland Blue Glass, and your container will help advertise, merchandise and sell your product.

BLUE *makes your product easier to see.*
BLUE *makes your product easier to remember.*
BLUE *makes your product smartly modern.*
BLUE *insures rich, distinctive appearance.*
BLUE *stands out, assures better display.*
BLUE *advertises your product in stores & homes.*
BLUE *builds profits, steps up repeat sales.*

Let us send you samples of appropriate stock designs. Or, let our design experts work with you in creating a bottle or jar for your exclusive use. Write today to Maryland Glass Corporation, Baltimore 30, Md.

PACK TO ATTRACT IN

Maryland Blue

Also available in Crystal Clear Glass

your invitation

To see

HOW MODERN MACHINES CAN SOLVE YOUR PACKAGING PROBLEMS

We want to show you the COMPLETE profit-building features of Beck machines . . . what goes into their manufacture and design . . . how each production step is calculated to give you the utmost in cutting efficiency . . . the speediest in delivery. In short, we want to show you the works.

Our products and our plant have been streamlined. The most modern equipment—functional color on both our plant interior and on our products—our assembly line is illuminated with better than the best daylight visibility.

Since you'll be practically in our backyard when you visit the Packaging Show anyhow—why not stop in and discover how Beck machines are built to put PLUS in your profits.

AUTOMATIC ROLL SHEET CUTTER

ELECTRIC EYE CUT REGISTER SHEETER

RAZOR BLADE SLITTER AND REWINDER

ENGRAVED ROLL PRINTER

BURLAP BAG CUTTER AND FOLDER

SHEETER-PRINTER FOR SAMPLE BOOKS

CHARLES BECK MACHINE CORPORATION

13th and CALLOWHILL STREETS, PHILADELPHIA 8, PA.

Also available in Crystal Clear Glass

NOW! A NEW SOURCE OF

QUALITY ALUMINUM FOIL!

Permanente Metals opens first aluminum foil plant in the West. Assures Manufacturers and Converters, wherever located, a steady supply of plain Kaiser Aluminum Foil in thicknesses of .006 to .00025, available in rolls up to 30½ inches wide.

Located at Permanente, California, Permanente Metals' aluminum foil plant is the first of its kind in the West.

Purchased from the Foreign Liquidation Commission under the German reparations agreement, it has been rebuilt, modernized, and equipped with the finest precision machinery.

Now manned by highly skilled personnel, it is turning out plain aluminum foil of a quality and uniformity unsurpassed by any other plant in the country.

Quality and Service stressed

Because Permanente Metals' integrated operation assures complete control of every step of production—from bauxite to finished foil—you can be sure not only of consistent quality, but also of reliable service.

The production of aluminum foil marks another step forward in the nine year growth of Permanente Metals ...a company which now produces almost as much aluminum as the entire industry produced just ten years ago.

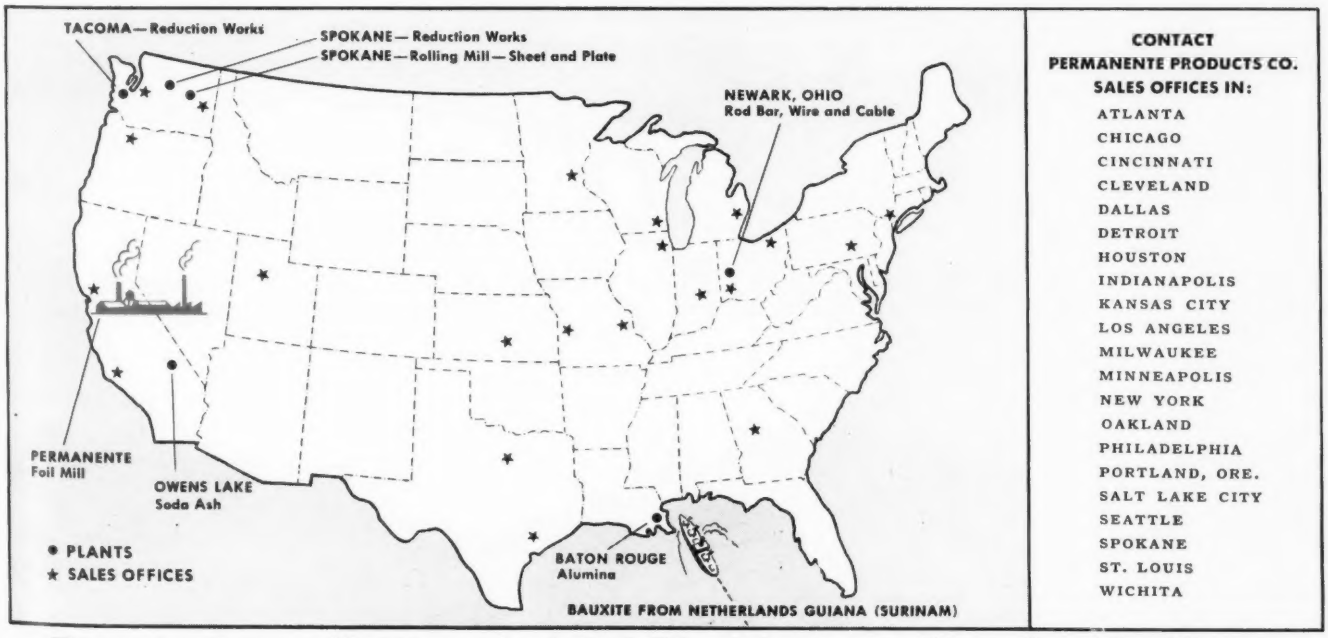
In achieving this, Permanente Metals has won the loyalty of thousands of U. S. manufacturers by setting high standards in the industry for the quality of its metal and the dependability of its service.

As a source of foil—Kaiser Aluminum Foil—these same standards will be consistently maintained. An inquiry by you and we'll demonstrate what we mean.

Permanente Metals

PRODUCERS OF

Kaiser Aluminum Foil



CONTACT
PERMANENTE PRODUCTS CO.
SALES OFFICES IN:

ATLANTA
CHICAGO
CINCINNATI
CLEVELAND
DALLAS
DETROIT
HOUSTON
INDIANAPOLIS
KANSAS CITY
LOS ANGELES
MILWAUKEE
MINNEAPOLIS
NEW YORK
OAKLAND
PHILADELPHIA
PORTLAND, ORE.
SALT LAKE CITY
SEATTLE
SPOKANE
ST. LOUIS
WICHITA

This map shows Permanente Metals' integrated production facilities, which assure you consistent quality and dependable service.

Getting your full share of the PACKAGING MARKET?

for instance

cosmetics sales for '48 top $687,000,000*.. all of it packaged

*Estimate by Toilet Goods Association *does not* include packaged toilet soaps which had an estimated sales volume in excess of $123,000,000.

IN THE BUSY, highly competitive cosmetics industry, swift packaging changes are the order of the day. Factors ranging from fascinating sales appeal to plain hard cost influence the men who make the industry's packaging decisions. For, while these men know the important role packaging plays in moving cosmetics over the counter, they are keenly aware that, in this industry particularly, the cost of the package is a major factor in determining total product cost, retail price and, of course, their margin of profit.

The editorial and advertising pages of MODERN PACKAGING help cosmetics packagers to make their decisions on materials, design, display and equipment. They can carry your sales messages—at a very low cost per contact—to these men, some of whom your salesmen can't see, can't see often enough or don't even know about. And by advertising in MODERN PACKAGING regularly, you'll be sure to reach your prospects at precisely the time they are planning package and equipment changes.

Though MODERN PACKAGING covers packaging men in every major cosmetics firm, the industry represents a very small segment of the full circulation. The total distribution of approximately 15,000 copies, including a net paid readership of more than 12,500—highest in the packaging field—gives you packaging buyers in all of the 45 industries that package the nation's products.

MEMBER AUDIT BUREAU OF CIRCULATIONS

ABC

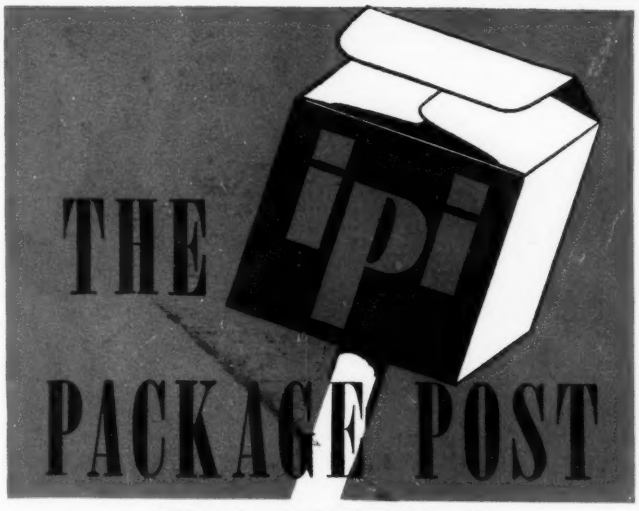
Modern packaging

A BRESKIN PUBLICATION

122 East 42nd Street · New York 17, N. Y.

Color off the Beam?
Try This Control Scheme

Today, it's common knowledge that science safely guides aeroplanes on an electronic beam. But did you know that today package colors, too, are kept on the beam electronically? Our Recording Spectrophotometer photoelectrically plots curves of your package colors. These curves become permanent records against which you can check colors any time. Then your colors look the same—no matter where or when printed.



IPI is a trade-mark of Interchemical Corporation

Right from the Start
Let Inks Play a Part

"Think about ink while the package is still a gleam in the designer's eye," that's the way to start a package production job right. You get better results all around when you call your printer early. He can then consult his ink supplier. Printing problems are minimized and colors are selected which can be matched in inks that have the resistance characteristics you want. We work closely with many printers this way.

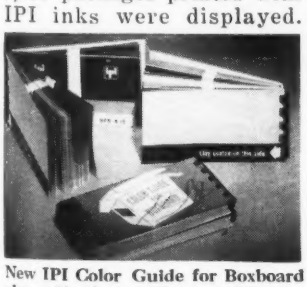
IPI • DIVISION OF INTERCHEMICAL CORPORATION • 350 FIFTH AVE., N. Y. 1 • ADDRESS INQUIRIES DEPT. A.

RECORDING SPECTROPHOTOMETER IN OPERATION IPI FEATURE AT ATLANTIC CITY PACKAGE SHOW

The G.E. Recording Spectrophotometer was a feature of the IPI exhibit at the Packaging Show. Spectrophotometer showed how color stand-

Recording Spectrophotometer

ards are established by photoelectric measurement. Over 2,000 packages printed with IPI inks were displayed.



New IPI Color Guide for Boxboard shows 40 colors on clay coated (American Coating Mills) and patent coated, varnished and unvarnished. Hundreds of visitors to the IPI Booth received one of the Guides.

"MILKMAID LINE TOPS IN EYE APPEAL," SAY WOMEN WHO KNOW COSMETIC FIELD

In the highly competitive cosmetics field, the unusual and attractive Milkmaid bottles, packages, and wrappers have won both critical acclaim and sales success.

Packaging executives of Milkmaid, Inc. worked closely with package designers and printers to secure quality reproductions of the dainty, pastel-colored Milkmaid floral designs, and to insure clean, sharp printing of small type on glass, boxboard, and Kromekote wraps.

IPI inks were used throughout. Bottles were printed by Anagraphic Process, N.Y.C.; packages by International Folding Box, North Bergen, N.J., and F. N. Burt, Buffalo; Kromekote wraps were printed by A. L. Reid, N.Y.C.

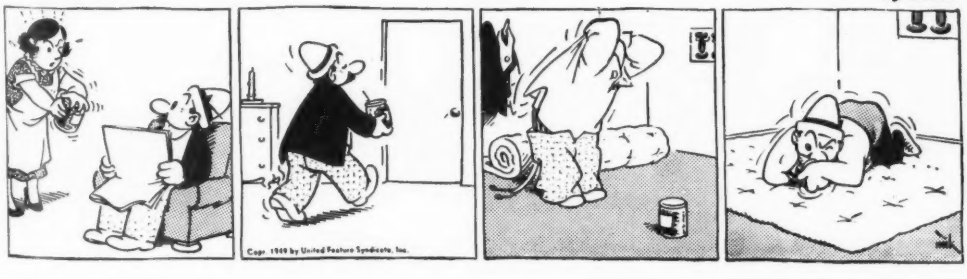
ALUMINUM BOTTLE CAPS PRINTED AND DEBOSSED IN ONE MOTION

Two-color milk bottle caps of aluminum foil are printed and debossed in one motion by the Basca Manufacturing Co., Indianapolis. A conventional-type machine is used.

Colors are bright, and print sharp. Both transparent and opaque heavy-bodied IPI inks are used.

Package printing inks are featured in the above advertisement in the NAPIM campaign to boost the use of more color in advertising today.

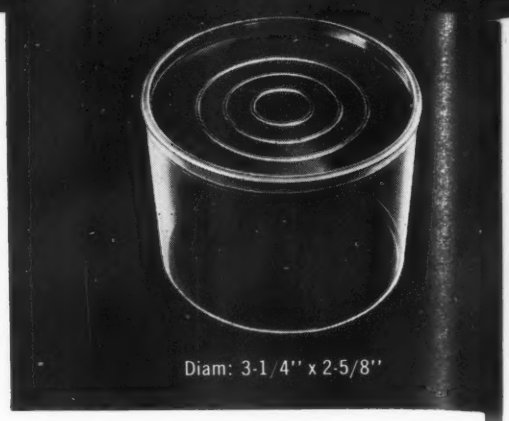
FERD'NAND **By Mik**



Make
Tri-State

RIGID PLASTIC BOXES

Buyers'
Bonuses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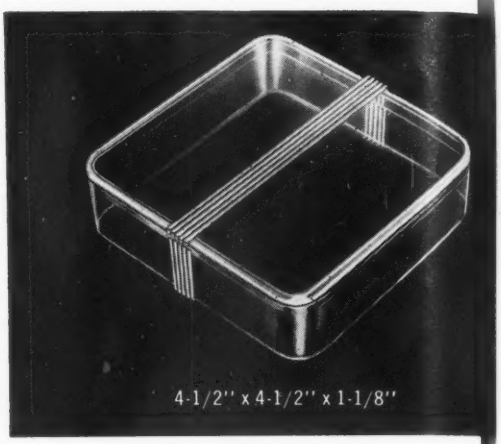
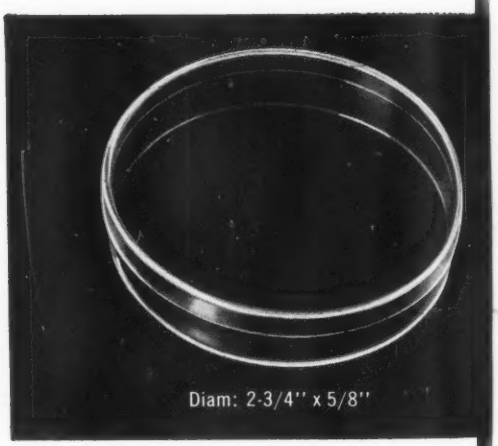
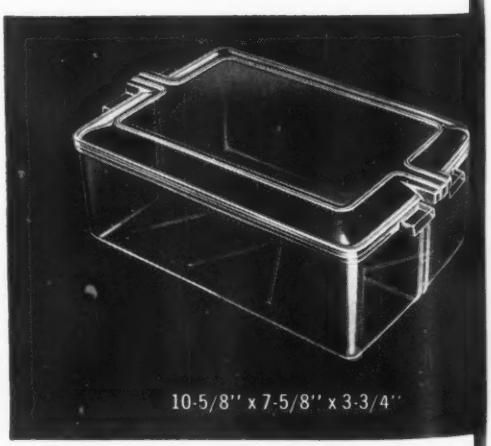

4-1/2" x 4-1/2" x 1-1/8"


Diam: 2-3/4" x 5/8"


10-5/8" x 7-5/8" x 3-3/4"

PACKAGE IN PLASTIC—IN RIGID PLASTIC—FOR ADDED PROTECTION—GREATER POINT-OF-SALE APPEAL—BONUS UTILITY BOXES YOUR CUSTOMERS CAN USE

Feature your product in one of these gleaming, crystal-clear plastic containers. Each box is a showcase in itself, which keeps its contents completely protected from dust, dirt, contamination, and all harmful agents normally encountered.

Beautiful, transparent Tri-State Rigid Plastic Boxes ***stay*** with your customers. They'll find a hundred uses for these rugged, non-warping, washable containers—and come back again and again for the item in the ***bonus*** utility box.

There's a Tri-State Rigid Plastic Box to fit your product, build your sales, cut down on your packaging operations. If we cannot satisfy your needs from our wide range of stock sizes and shapes, we'll mold to your specifications.

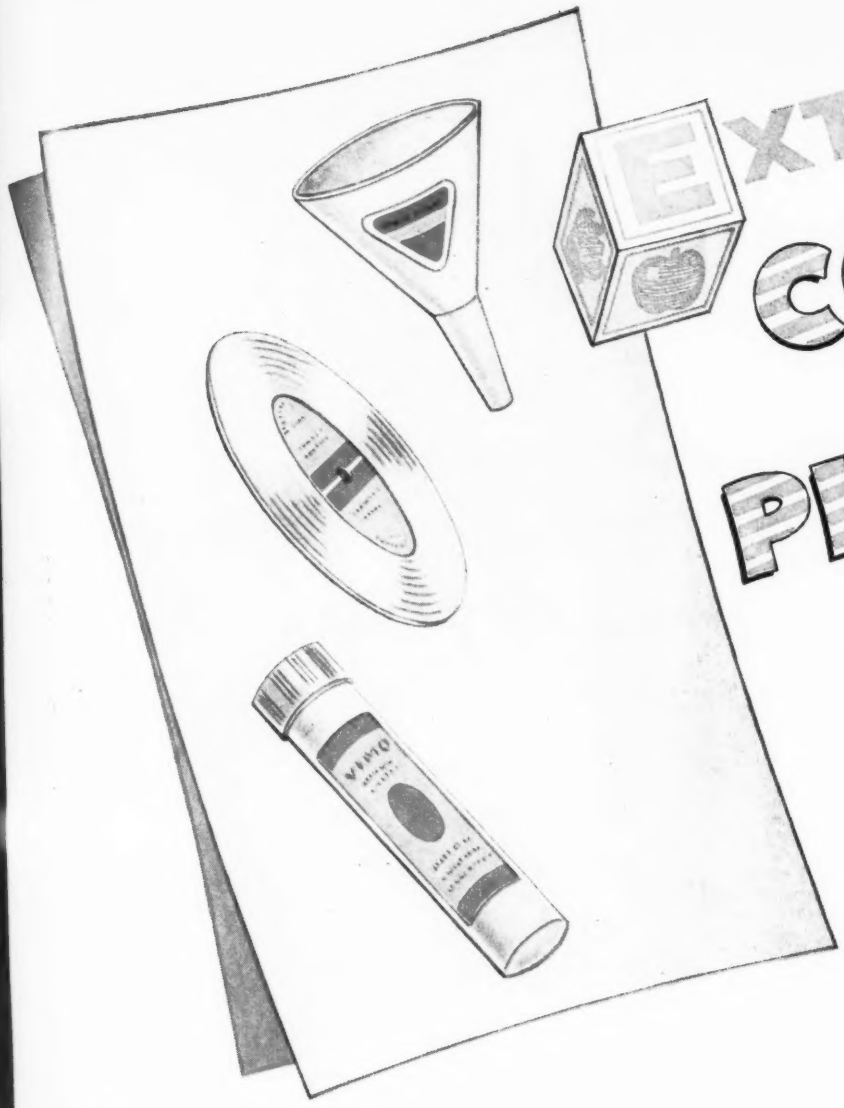
NOTICE: We are the sole inventors and originators. Patents have been applied for on all these designs, and infringers will be prosecuted.

The best Rigid Plastic Boxes are Injection Molded by

TRI-STATE PLASTIC MOLDING COMPANY

HENDERSON, KENTUCKY

New York Offices: 12 E. 41st Street—Murray Hill 3-6572

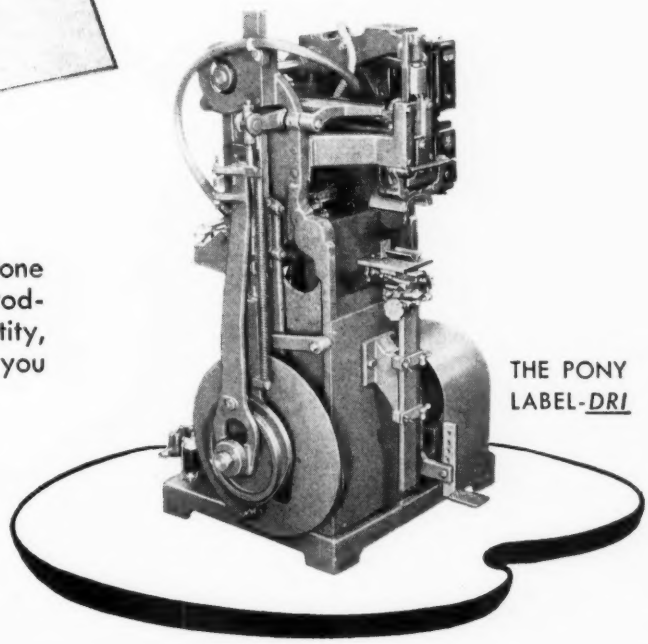


EXTRA COLOR *in* PLASTICS

☆ DECORATION

☆ TRADE MARKS

☆ LABELING



THE PONY LABEL-*DRI*

COLOR—a touch, or a *splash!* added to a monotone plastic "lifts" it into the realm of NEW and *better* products. Solid color or many colors, give swifter identity, have more eye-pulling power . . . and the colors you want are so easily applied by the LABEL-*DRI*,* with a capacity of 60 per minute, utilizing *plastic-coated* labels that become a part of your product instantly, permanently, and in perfect register.

Ask for details—and examples!

NEW JERSEY MACHINE *Corporation*

1510 WILLOW AVE. • HOBOKEN, N. J.

Factory Sales and Service Branches at
Chicago, 325 W. Huron Street
Cincinnati, 1701 Carew Tower
Los Angeles, 2500 W. 6th St.

LABEL-*DRI* uses NO glue, puts EXTRA color in Plastic products. A logical improvement in adding decorative effects similar to embossing, decals, die stamping, etc.

600 *Reg. U. S. Pat. Off.

ONE CALL for ALL

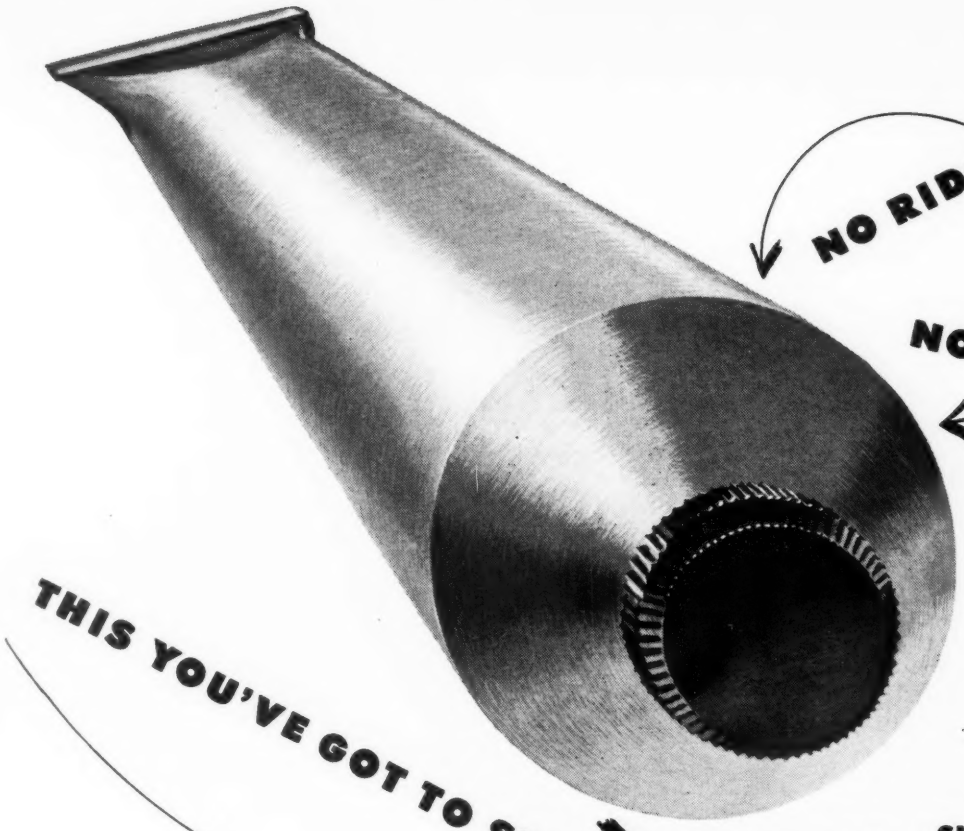
River Raisin
DIMENSIONAL DISPLAYS

River Raisin is equipped to supply all of your display requirements. A new and different service . . . as convenient as your telephone. Our Creative Staff supplies the basic idea . . . our Production Experts produce the finished display in our fully equipped Monroe, Michigan plant. You can expect economies because River Raisin is one of the country's largest manufacturers of corrugated and fibre board. The next time you want dimensional displays that produce immediate action call for our *ONE CALL FOR ALL* service.

RIVER RAISIN PAPER COMPANY

DISPLAY DIVISION • MONROE, MICHIGAN

CORRUGATED AND SOLID FIBRE SHIPPING CONTAINERS • PACKING MATERIALS • FIBRE BOARDS • CORRUGATING STRAW • SILICATE OF SODA



Send for a sample of SUN TUBE'S exclusive new "satin-finish" shoulder aluminum tube today!

No die marks! *No* ridges! Just satin-smooth "satin-finish" shoulders on Sun Tube's handsome new aluminum tubes.

Result: This exclusive Sun Tube development makes your product look like $1,000,000. (Yet it costs no more than any other aluminum tube!)

But send for a sample and see all this for yourself. And on your say-so, we'll fill your order with the same fast, dependable service Sun Tube's been giving for over 20 years. Just phone or write our home office or nearest representative.

- **NEW "SATIN-FINISH" SHOULDERS!** A Sun Tube exclusive!
- **BEAUTIFUL SOFT-LUSTRE FINISH!** Improves the looks of your product!
- **NO DIE MARKS OR RIDGES!**
- **PLUS ALL THESE QUALITY TUBE ADVANTAGES!**
  - Extra flexible
  - Clean, strong, uniform
  - Clear reproduction—any design or color
  - Costs no more than other quality tubes

Aluminum Tubes by Sun Tube

Sun Tube Corporation, 181 Long Ave., Hillside, N. J.

Chicago 3, Ill. . . . . *James L. Coffield, Jr., 105 West Adams St.*
St. Louis 1, Mo. . . . . . *M. P. Yates, Arcade Building*
Detroit 2, Mich. . . . *Joseph P. Giroux, 2970 West Grand Blvd.*
St. Paul 1, Minn. . . . *Alexander Seymoor, 1411 Pioneer Building*
Cincinnati 8, Ohio . . . . . *Ralph H. Auch, 3449 Custer Road*

FREE SAMPLE!

Please send me your new aluminum tube with the exclusive "satin-finish" shoulder. No obligation, of course.

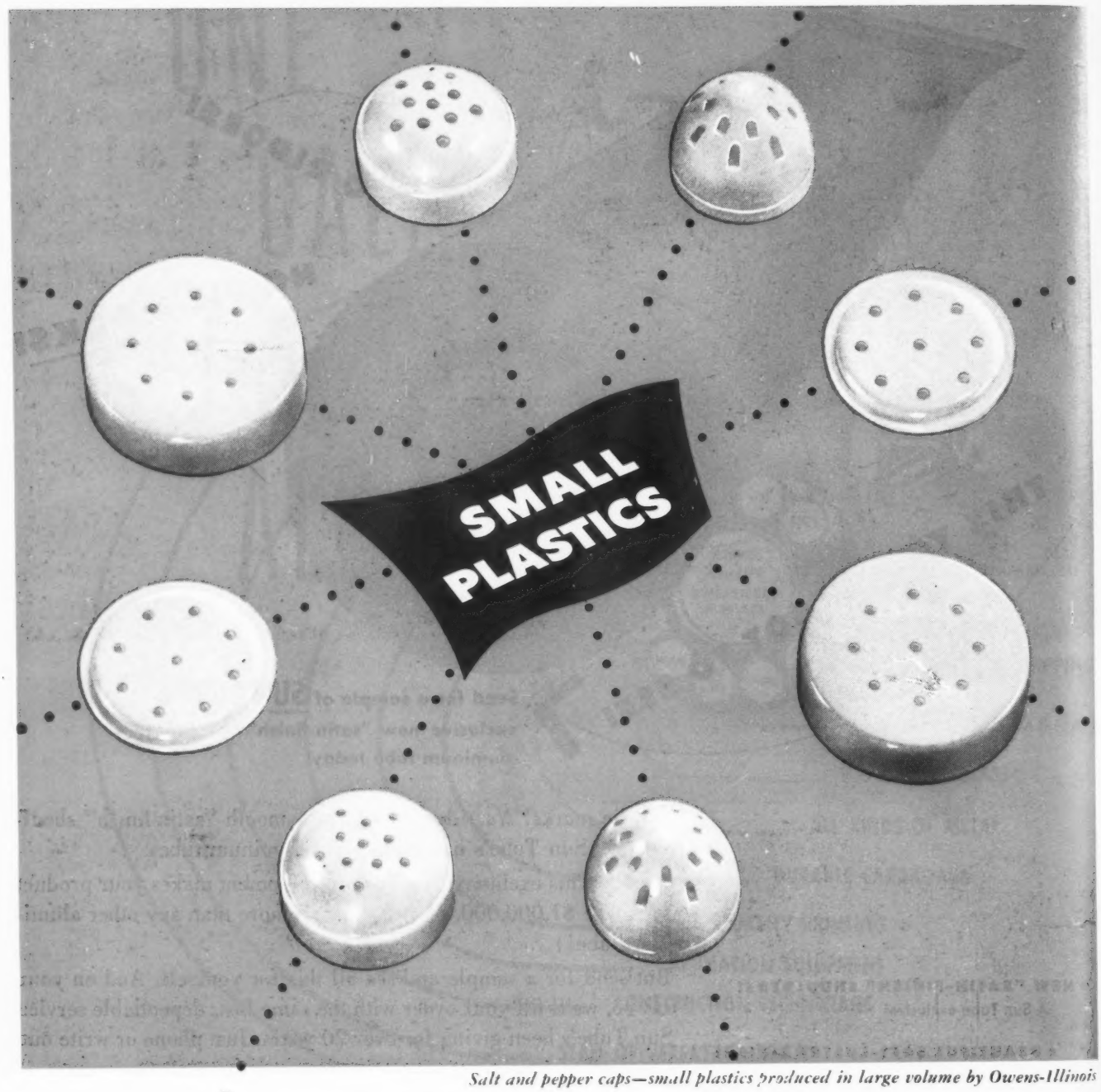
Name _____

Name of Company _____

Address of Company _____

City _____ Zone _____ State _____

MP



Salt and pepper caps—small plastics produced in large volume by Owens-Illinois

. . . on BIG orders, our facilities are TOPS

For SP in BV*
<O>
See Owens-Illinois

● Small plastic items, like these special dispensing caps, fit our manufacturing facilities to a tee. We are specialists in small plastics needed in large volume.

So whatever you need—an intricate, custom-molded television part or a simple, stock-mold bottle closure . . . Owens-Illinois will fill your requirements quickly and accurately *at low cost.*

To give you this top-notch plastic production, Owens-Illinois maintains *complete* molding facilities. Your item's design is matched with the exactly right molding process for the most efficient and economical high-speed production.

For prompt service, call the Owens-Illinois branch office near you.

PLASTICS DIVISION

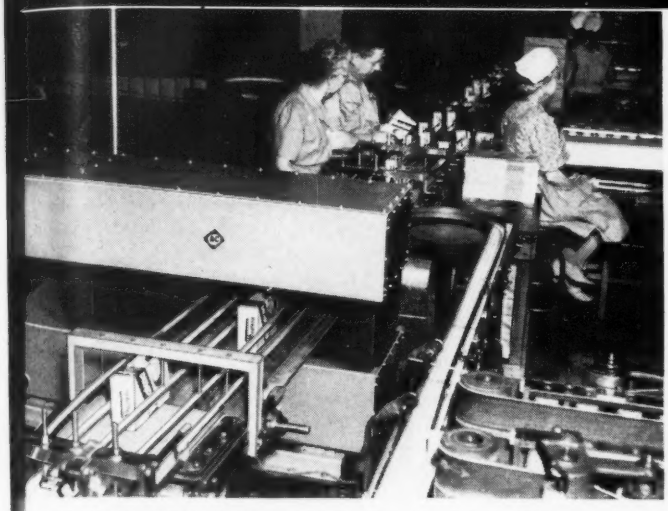
OWENS-ILLINOIS GLASS COMPANY

TOLEDO 1, OHIO · BRANCHES IN PRINCIPAL CITIES

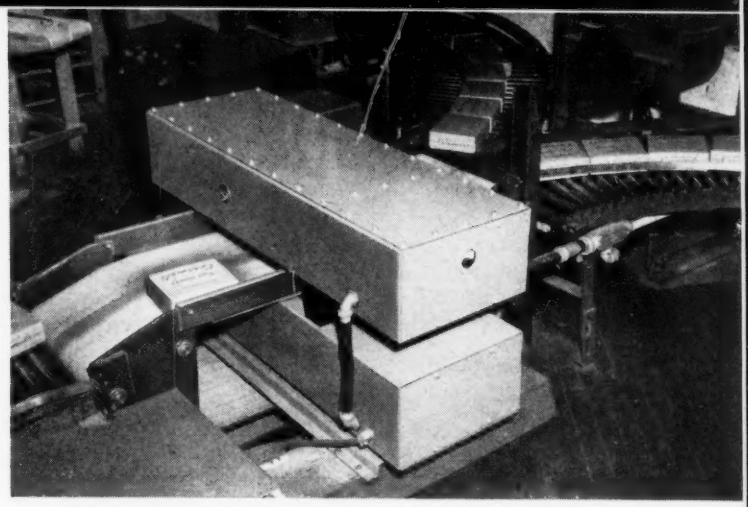
*Small Plastics in Big Volume

Examples of How Allis-Chalmers Metal Detectors

PROTECT PURITY OF PACKAGED GOODS



1 **PACKAGED FOOD** industries are using Allis-Chalmers Electronic Metal Detectors as an inspection method to insure product purity and maintain customer good-will. Cereals, such as Wheatena shown above, biscuits, vegetables, and prepared foods only hint at the numerous applications that are possible.



2 **PACKAGED CONFECTIONS** are protected at Peter Paul Candy Co. from magnetic or non-magnetic metal particles as small as 39 thousandths of an inch in diameter by electronic Metal Detectors. Continued customer good will, resulting from uniform product purity, is an important advantage for metal detector users.

3 **PRE-PACKAGING** inspection of foods — including vegetables, fruits, meats, etc. — to be packed in metal or foil containers is another Allis-Chalmers Metal Detector application. Fine smoking tobaccos, too, are inspected for tramp metal before packaging as in this application at the Phillip Morris Company.

4 **PHARMACEUTICALS** — Adhesive tape, sanitary napkins, prepared bandages, are inspected by Allis-Chalmers Metal Detectors to assure freedom from metal particles that might cause irritation of delicate skin tissues. Pictured are medicated cough drops being safeguarded by a metal detector at the Vick Chemical Company.

MAGNETIC AND NON-MAGNETIC PARTICLES, magnetic as small as 39 thousandths inch in diameter, regardless of how deeply embedded, are instantly spotted by the Allis-Chalmers Electronic Metal Detector. Systems may be arranged so that: 1. conveyor is stopped, 2. automatic rejection is actuated, or 3. an alarm signals for manual removal of the contaminated article. The aperture, sensitive to 25", will handle belts to 24" at speeds 15 to 600 fpm. Aperture heights: of 2", 4", 7", and 12". A 2666

ALLIS-CHALMERS

ALLIS-CHALMERS, 1124A SO. 70 ST. A 2
MILWAUKEE, WIS.

Please send more information about Metal Detectors.

Name.....

Title.....

Company.....

Address.....

Perky Pickle is a well chosen character to represent these *Fleishman pickle products. They're perky in flavor and perky in appearance.

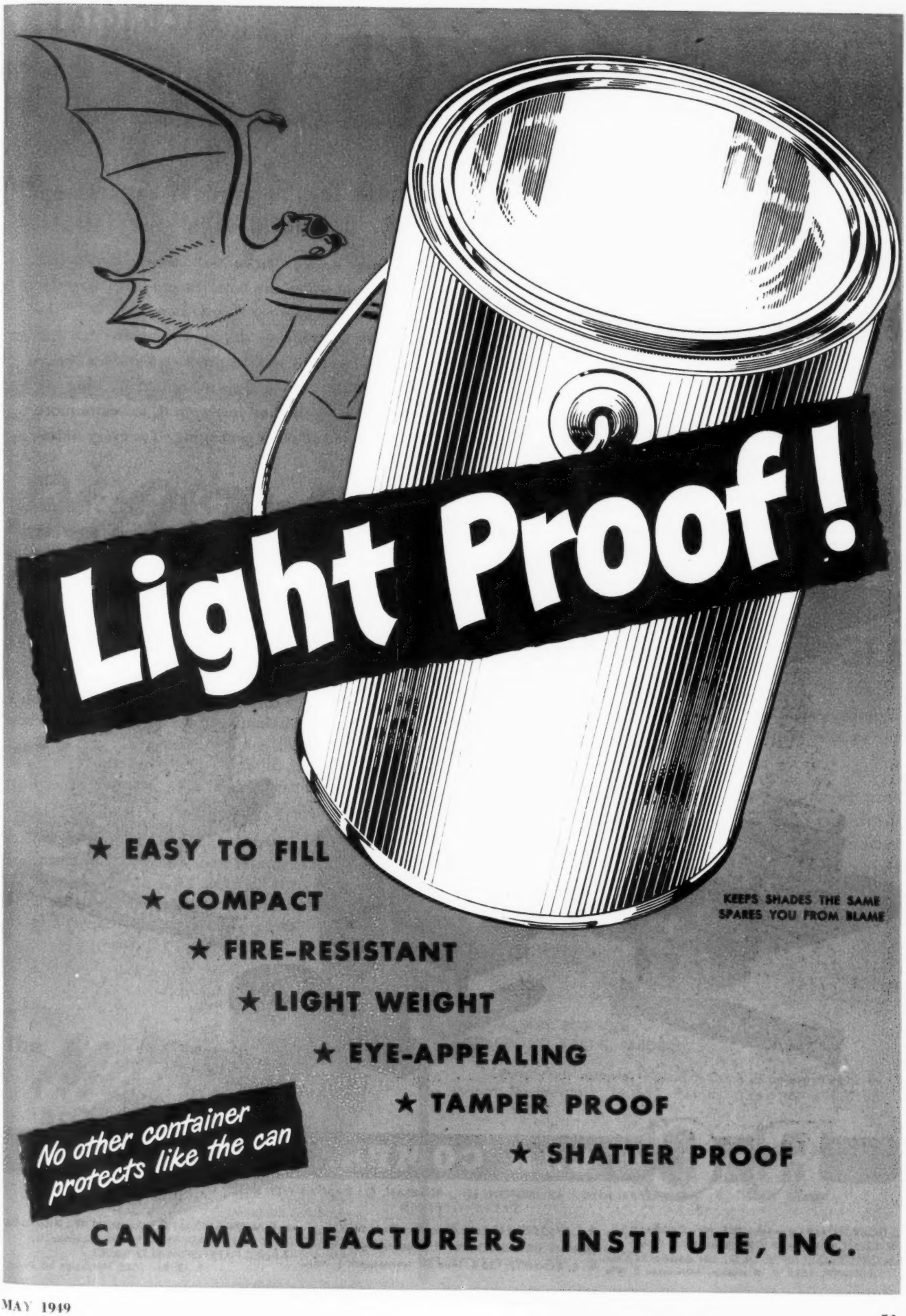
The Crown Screw Caps used on these products are good examples of how closures can be used as real merchandising aids. They are lithographed in three colors to match the attractive labels, and a handy little spot has been provided where the storekeeper can write in the price. It all adds up to good selling.

And for good sealing, you just can't beat the combination of the patented Crown Deep Hook Thread and the special Crown liners. More and more prominent food and drug packers are using Crown Closures, so why not let one of our representatives show you how they can give *you* better sealing. Crown Cork & Seal Co., Baltimore 3, Md. *World's Largest Makers of Metal Closures.*

* *Packed by Fleishman's Pickles, Inc., St. Louis, Mo.*

CROWN CLOSURES

Approved by millions of housewives


Light Proof!
★ EASY TO FILL
★ COMPACT
★ FIRE-RESISTANT
★ LIGHT WEIGHT
★ EYE-APPEALING
★ TAMPER PROOF
★ SHATTER PROOF
KEEPS SHADES THE SAME
SPARES YOU FROM BLAME
No other container protects like the can
CAN MANUFACTURERS INSTITUTE, INC.

DESIGNED for BETTER { PACKAGING / SALES

Because they're product-engineered by R. C. Can design specialists

Containers aren't "jack-of-all-trades". By careful research and study into both the product characteristics and packaging requirements, R. C. Can engineers are able to design containers that are "tailored" to each specific product. Functional features—such as filling, dispensing and stacking are combined with eye and buy-appeal, to assure more profitable and efficient packaging—for every industry served.

Complete, Economical Packaging Service

From planning . . . testing . . . and manufacturing your package . . . to designing your closure and label . . . to printing and applying the label . . . the containers are delivered ready for filling . . . packaging service from *one* dependable source.

R·C· CAN COMPANY

R.C.CAN CO. The Stamp of Quality ST. LOUIS, MO.

BRANCH FACTORIES: ARLINGTON, TEX.; RITTMAN, O.; KANSAS CITY, MO.

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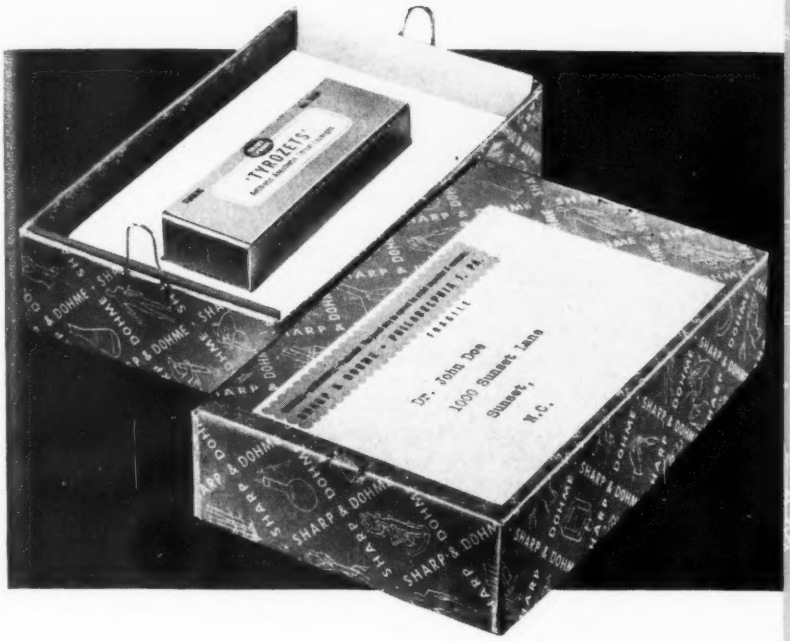
S. W. SCOTT, 608 McCall Bldg., Memphis 3, Tenn.
CAN SUPPLY CO., 1709 W. 8th St., Los Angeles 14, Calif.
C. J. TAUGHER, 1628 W. Wisconsin, Milwaukee 3, Wis.
R. J. WATERS, 516 Fifth Ave., New York, N. Y.
EDWIN F. DELINE CO., 224 W. Alameda, Denver 9, Colo.
W. L. BENNETT, 126 S. Third St., Minneapolis 1, Minn.
L. C. MORRIS CO., 1125 Spring St., N. W., Atlanta, Ga.
H. K. GRINSTEAD, 633 S. 5th St., Louisville, Ky.
ALLIED PAPER SPECIALTY SALES
P. O. Box 1082, Pittsburgh 30, Penna.



Personalized box covering paper, printed by Mason. Available in one to four colors.

BOOST SALES

by sampling through the mails in personalized MASON SAMPLING PACKAGES

Take a cue from one of America's leading pharmaceutical companies who stimulates latent interest, who increases its sales by mailing samples of its products to *selected* prospects in the medical profession. To help insure the success of these sample mailings, they choose *personalized* Mason MailMasters.

Perfect for mailing drugs, cosmetics, foods, hardware and premiums of every sort, Mason MailMasters have the famous Mason wire clasp closure to speed handling. Even though Mason MailMasters are light in weight (which keeps mailing costs low), the extra strength materials from which they're made, guarantee that your sample will reach its destination in perfect condition.

Join the parade of companies who are turning prospects into customers by mailing samples to them in *personalized* Mason MailMasters. . . . It's the modern way to sell! Send us a sample of your product right now. You'll get it back in a suitable Mason MailMasters, along with details about *personalized* cover papers. Write today!

The Mason BOX COMPANY

Main Office
Attleboro Falls, Mass.

New York Office
175 Fifth Avenue

THE MASON BOX CO.
ATTLEBORO FALLS, MASS.

Here's our sample. Send it back in an appropriate Mason MailMaster. Include details about personalized papers, too.

Name.....

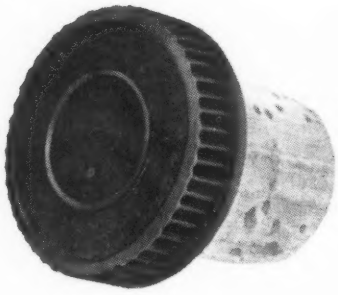
Company.....

Address.....

City.....State.....

"QUICK TO OPEN"

"EASY TO HANDLE"



"CAN BE USED AGAIN"

"AIRTIGHT PROTECTION"

"EASIER TO CLOSE"

SURVEY PROVES THESE ARE THE REASONS BARMEN VOTE 2 TO 1 FOR WOOD-TOP CORK CLOSURE

MORE than 200 barmen in four major American cities were recently asked which type closure they prefer. The embossed wood-top cork was their overwhelming choice. This is the type closure Dodge has manufactured and sold to leading distilleries for many years.

Conducted by Fact Finders, Inc., for the Cork Institute of America, this special investigation covered high-traffic bars . . . places where speed and ease in handling are a *must*.

Read for yourself the 19 different reasons why barmen prefer a wood-top cork. The complete report, packed with much valuable information for you, will be sent on request.

DODGE CORK CO., INC. • LANCASTER, PA.

Dodge

CORK CLOSURES

DESIGNED TO GUARD THE INTEGRITY OF THE CONTENTS

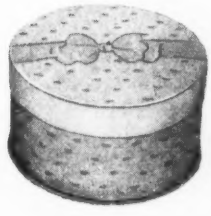
Wistful Magic

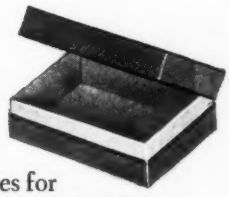
. . . and a touch of delicate splendor are imparted through the elegant craftsmanship behind Rowell containers.

This artistic achievement adds subtle persuasion to the purchase of cosmetics for face and dusting powders and helps send them on to their heavenly missions.

E. N. Rowell Co. Inc.
Manufacturers of Fine Paper Boxes
BATAVIA, N.Y.

50 years of craftsmanship





Boxes for pharmaceuticals

Magnificent color printing

Here's the *Smart* way to select paper!

PRINTERS—LITHOGRAPHERS

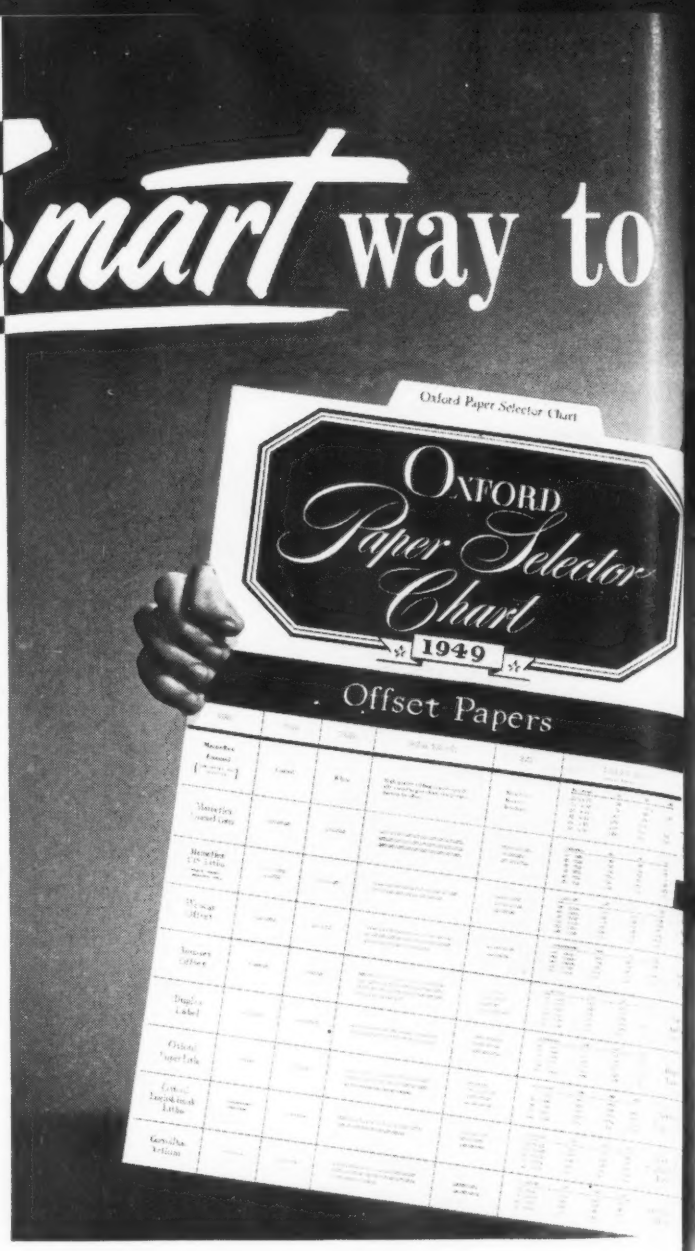
AGENCIES—ADVERTISING MANAGERS

PURCHASING AND

PRODUCTION MEN—PUBLISHERS

ALL of you who are concerned with printing know it pays to be sure of the *right* paper for the job. But getting all the answers hasn't been easy. You've had to look in too many places, do too much figuring and fumbling. That's why you'll find this new Oxford Paper Selector Chart such a smart, sensible idea. It puts right at your finger tips *all* the facts you need to know about Oxford papers. Colors, sizes, and weights, finish, recommended screen, folding qualities, special characteristics, principal uses—and the suitability of each grade for offset or letterpress.

Whether you produce printing or buy it, you'll find the Oxford Paper Selector Chart a real short-cut to better results. It's yours for the asking—phone your nearest Oxford Paper Merchant, or mail the coupon at right. Either way, you'll get yours promptly—it's just part of the service that makes Oxford Papers Help Build Sales.



FREE

From your Oxford Paper Merchant—or Mail Coupon Today

Oxford Paper Company, Dept. 14
230 Park Avenue, New York 17, N. Y.

Please send me a copy of your new Oxford Paper Selector Chart.

NAME . . . . . .

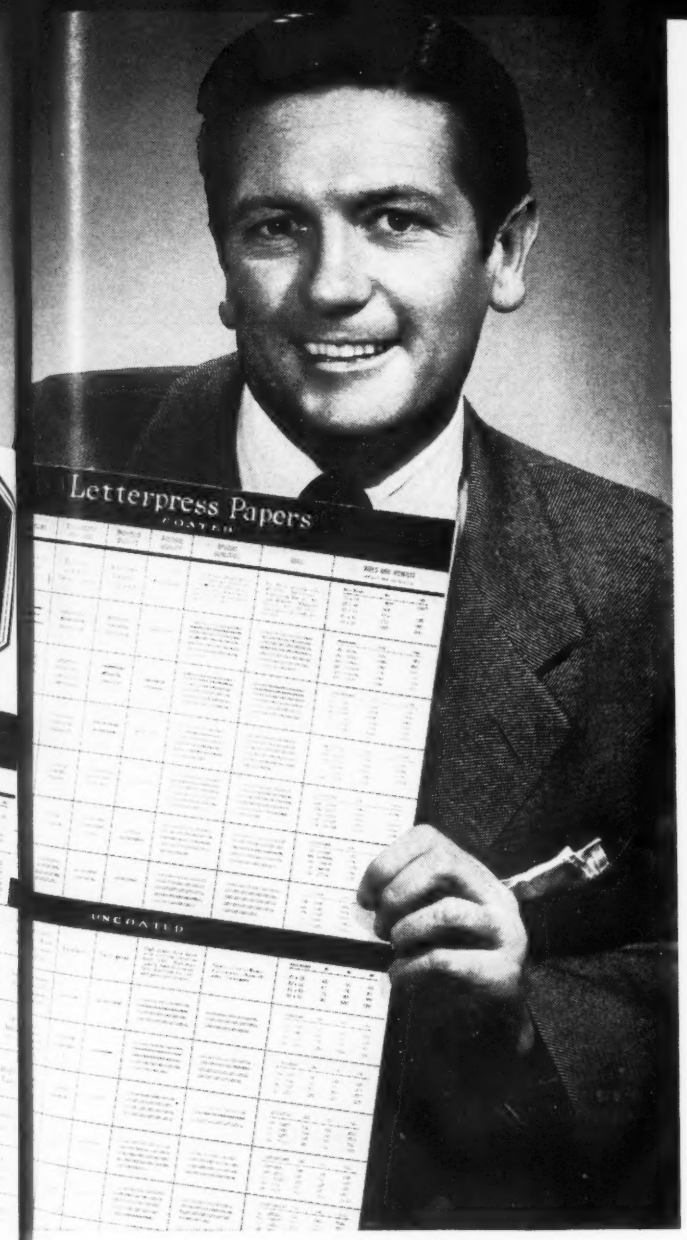
COMPANY . . . . . .

ADDRESS . . . . . .

CITY AND ZONE . . . . . STATE . . . . . .

OXFORD PAPER COMPANY, 230 Park Avenue, New York 17, N. Y.

Oxford Miami Paper Company, 35 East Wacker Drive, Chicago 1, Ill. • Mills at Rumford, Maine and West Carrollton, Ohio



OXFORD PAPERS

Help Build Sales

FIFTIETH ANNIVERSARY 1899 1949

Oxford Papers in a full range of coated and uncoated grades are designed to help your printed products build more sales—they give an extra quality to the finished job that assures profitable results.

YOUR OXFORD PAPER MERCHANT IS A GOOD MAN TO KNOW

Oxford Paper Merchants make it their business to meet your needs promptly—with paper that's *right* for your job. Get in touch with your nearest Oxford Merchant today—and ask for a copy of the new Oxford Paper Selector Chart. You'll find it useful—and you'll find him a good man to know!

Augusta, Maine	Carter, Rice & Co. Corp.
Baltimore, Md.	The Mudge Paper Co.
Bethlehem, Pa.	Wilcox-Walter-Furlong Paper Co.
Boise, Idaho	Blake, Moffitt & Towne
Boston, Mass.	Carter, Rice & Co. Corp.
Buffalo, N. Y.	Franklin-Cowan Paper Co.
Charlotte, N. C.	Caskie Paper Co., Inc.
Chattanooga, Tenn.	Bond-Sanders Paper Co.
Chicago, Ill.	Bermingham & Prosser Co.
	Bradner, Smith & Co.
Cincinnati, Ohio	The Johnston Paper Co.
	The Whitaker Paper Co.
Cleveland, Ohio	The Cleveland Paper Co.
Columbus, Ohio	Scioto Paper Co.
Dayton, Ohio	Cincinnati Cordage Co.
	The Whitaker Paper Co.
Des Moines, Iowa	Bermingham & Prosser Co.
Detroit, Mich.	Chope Stevens Paper Co.
Fresno, Calif.	Blake, Moffitt & Towne
Hartford, Conn.	Green & Low Paper Co., Inc.
Indianapolis, Ind.	MacCollum Paper Co.
Jacksonville, Fla.	Jacksonville Paper Co.
Kalamazoo, Mich.	Bermingham & Prosser Co.
Kansas City, Mo.	Bermingham & Prosser Co.
Lincoln, Neb.	Western Newspaper Union
Little Rock, Ark.	Roach Paper Co.
Long Beach, Calif.	Blake, Moffitt & Towne
Los Angeles, Calif.	Blake, Moffitt & Towne
Louisville, Ky.	Louisville Paper Co.
Lynchburg, Va.	Caskie Paper Co., Inc.
Manchester, N. H.	C. H. Robinson Co.
Memphis, Tenn.	Louisville Paper Co.
Miami, Fla.	Everglades Paper Co.
Milwaukee, Wis.	Allman-Christiansen Paper Co.
	Sensenbrenner Paper Co.
Minneapolis, Minn.	Wilcox-Mosher-Leffholm Co.
Nashville, Tenn.	Bond-Sanders Paper Co.
New Haven, Conn.	Bulkley, Dunton & Co., Inc.
New York, N. Y.	Baldwin Paper Co., Inc.
	Bulkley, Dunton & Co., Inc.
	Green & Low Paper Co., Inc.
	Miller & Wright Paper Co.
	The Whitaker Paper Co.
Oakland, Calif.	Blake, Moffitt & Towne
Omaha, Neb.	Western Paper Co.
Philadelphia, Pa.	Atlantic Paper Co.
	Wilcox-Walter-Furlong Paper Co.
Phoenix, Ariz.	Blake, Moffitt & Towne
Pittsburgh, Pa.	General Paper Corp.
Portland, Maine	C. H. Robinson Co.
Portland, Ore.	Blake, Moffitt & Towne
Providence, R. I.	Carter, Rice & Co. Corp.
Richmond, Va.	Cauthorne Paper Co.
Rochester, N. Y.	Genesee Valley Paper Co.
Sacramento, Calif.	Blake, Moffitt & Towne
St. Louis, Mo.	Bermingham & Prosser Co.
	Shaughnessy-Kniep-Hawe Paper Co.
	Tobey Fine Papers, Inc.
St. Paul, Minn.	Inter-City Paper Co.
San Bernardino, Calif.	Blake, Moffitt & Towne
Salt Lake City, Utah	Western Newspaper Union
San Diego, Calif.	Blake, Moffitt & Towne
San Francisco, Calif.	Blake, Moffitt & Towne
San Jose, Calif.	Blake, Moffitt & Towne
Seattle, Wash.	Blake, Moffitt & Towne
Sioux City, Iowa	Western Newspaper Union
Spokane, Wash.	Blake, Moffitt & Towne
Springfield, Mass.	Carter, Rice & Co. Corp.
	Mill Brand Papers, Inc.
Stockton, Calif.	Blake, Moffitt & Towne
Tacoma, Wash.	Blake, Moffitt & Towne
Tampa, Fla.	Tampa Paper Co.
Toledo, Ohio	Paper Merchants, Inc.
Tucson, Ariz.	Blake, Moffitt & Towne
Washington, D. C.	The Mudge Paper Co.
Worcester, Mass.	Carter, Rice & Co. Corp.

★ ★ NEW Stoway* ★ ★
PACKAGE PARADE!

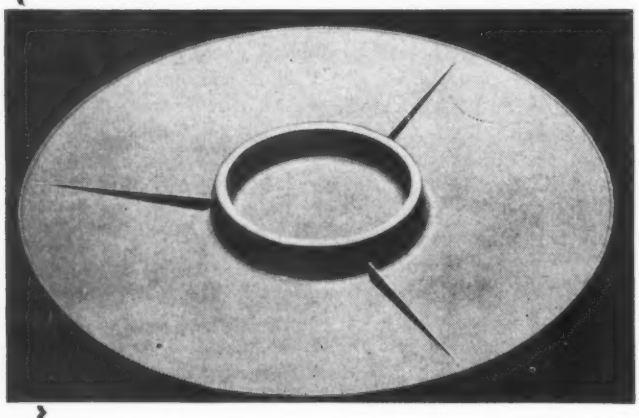
★ ★ ★

Proven, consumer acceptance of the
STOWAY PLASTIC CONTAINERS
assures your product of tested selling appeal.

BABY STOWAY—5 oz.

JUNIOR STOWAY—8 oz.

UTILITY DISHES



SERVICE DISH

STOWAY PLASTIC CONTAINERS are adaptable to many kinds of products. Each container is made of odorless, tasteless, chip-proof STYRON and will withstand heat to 160 degrees F—cold to −40 degrees F. Each container has been designed for appearance, utility and durability.

No. 2400 Baby Stoway—5 oz. capacity—twist-seal lid—3 transparent colors.

No. 2600 Junior Stoway—8 oz. capacity—twist-seal lid—3 transparent colors.

No. 600 Utility Dish—16 oz. capacity—4″ x 4″ x 2½″—tight seal lid—3 transparent colors.

No. 1200 Utility Dish—32 oz. capacity—8″ x 4″ x 2½″—tight seal lid—3 transparent colors.

No. 1800 Service Dish—14″ diameter—1⅛″ depth—lightweight—5 opaque colors and frosted white.

STOWAY OFFERS LOW COST—SALES BUILDING—CONSUMER ACCEPTED PACKAGES WITH A PLUS APPEAL OF HOUSEHOLD UTILITY!

* T.M.

A PRODUCT ATTRACTIVELY PACKAGED IS ALREADY HALF SOLD

Wire or write for detailed information and prices.

SOUTHERN CALIFORNIA PLASTIC COMPANY

1805 FLOWER ST. · GLENDALE · CALIFORNIA

ASK STOKES

Pack it faster, easier, cheaper on Stokes Tube-filling Machines

If it's no thinner than kerosene . . . no heavier than roofing-cement . . . if it will flow . . . you can pack it in tubes with a Stokes Tube Packaging Machine.

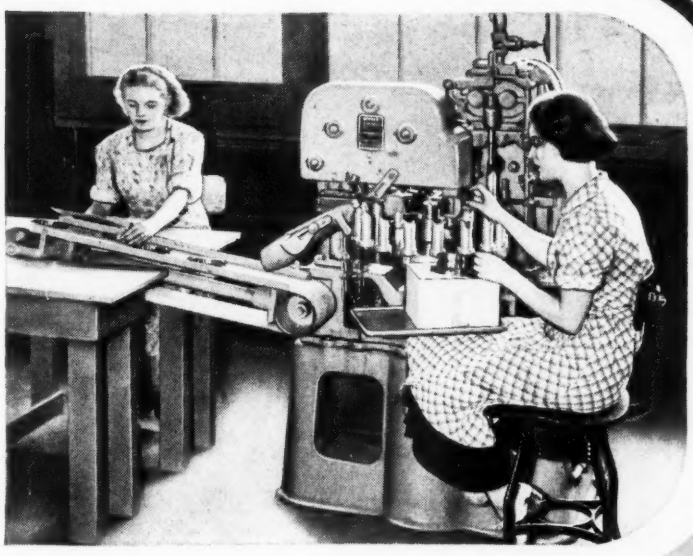
Tubes are flexible, compact, light, clean to handle. They offer strong selling-points in the package.

Stokes' commanding reputation in the field of Tube Packaging machinery is only partly due to the mechanical superiority of Stokes Machines. Largely it is due to the complete advisory, research and test service by which Stokes engineers help you to choose precisely the right machine and attachments from the complete line of Stokes Tube Packaging machinery.

The Stokes-patented Westite Hermetic Closure assures positive sealing of oily mixtures . . . of "leakers" and "seepers" . . . of substances that tend to oxidize . . . of other specialties that are usually difficult to package in tubes.

You need not guess about Tube Packaging. Write F. J. Stokes Machine Co., 5970 Tabor Rd., Philadelphia 20, Pa.

Stokes makes Tablet Machines, Pharmaceutical equipment, Tube Fillers, Vacuum and Special Processing equipment, Vacuum Pumps and Gages, Plastics Molding Presses, Water Stills, and Special Machinery.



Stokes Series 90 Special Model Tube Filling, Closing and Sealing Machine, equipped for "Fat-Filling." Handles up to 30 tubes per minute, up to 2" diameter, 10" length, 9 fluid ounces capacity.

STOKES KNOWS HOW

Outstanding Packaging

*Sanitape-Sealtite

BUT WHAT ABOUT THE COST . . .

In a majority of cases Sanitape-Sealtite costs less — a moment's consideration will tell you why.

PACKAGING MATERIALS used are not expensive.

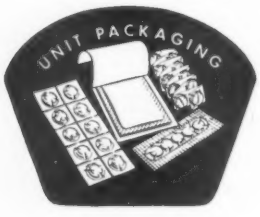
ELIMINATION of numerous protective containers is possible, because Sanitape-Sealtite packaging seals each unit in its own air-tight compartment — protected from dirt, moisture, breakage or handling.

REDUCED shipping and handling charges are effected through the elimination of heavy-weight protective containers.

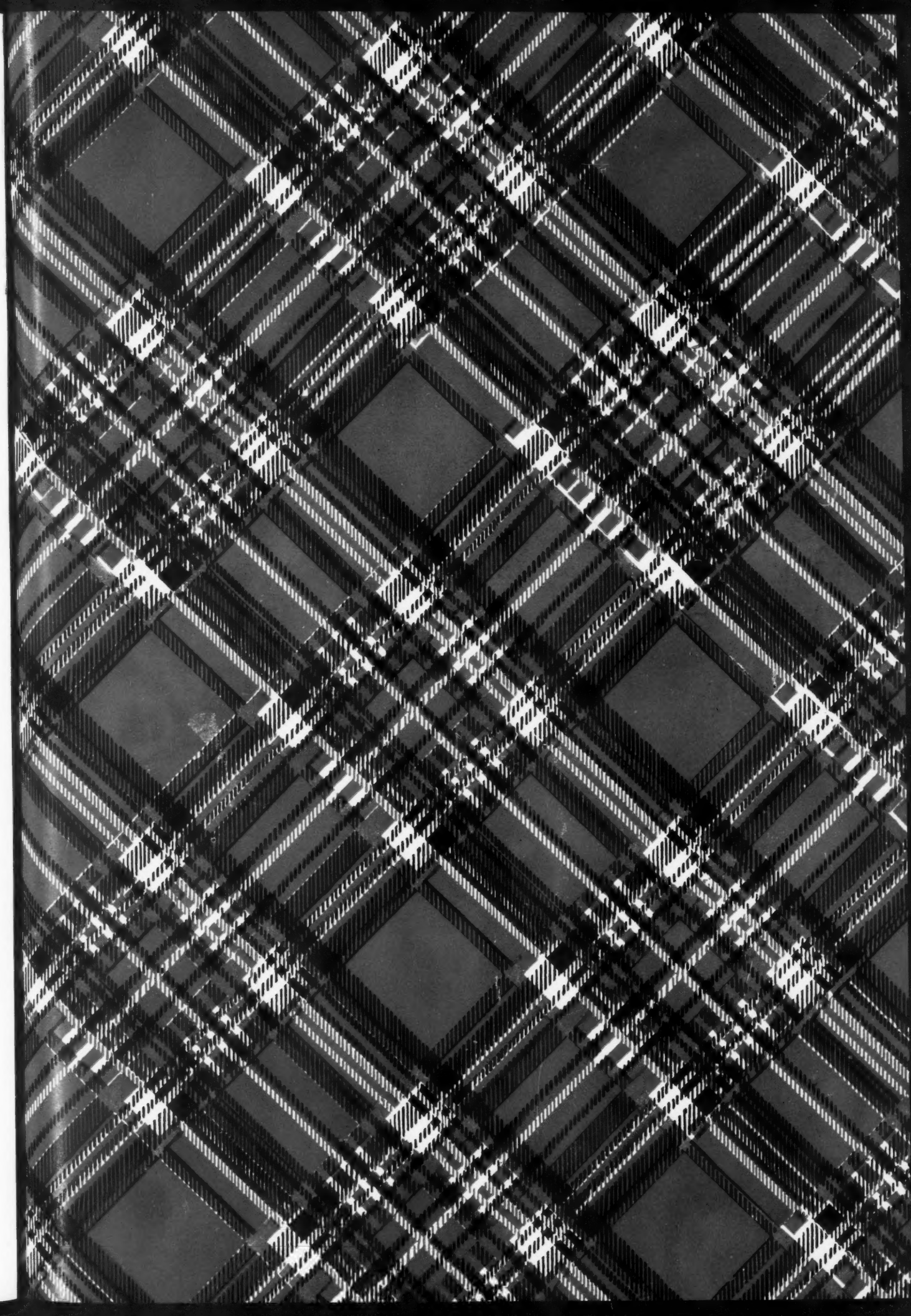
EFFICIENT, VOLUME PRODUCTION of our contract packaging division attains an unusually low unit cost, reduces your operational overhead, and assumes complete responsibility for every packaging detail.

We shall be glad to discuss this important matter with you, for in the final analysis it spells out *superior packaging* at *less cost.*

IVERS-LEE COMPANY · 215 CENTRAL AVE., NEWARK, N. J.



* Sanitape-Sealtite is a unique method for packaging pills, tablets, capsules, creams and powders, by which each unit or unit-dose is sealed in its own air-tight compartment—assuring complete protection and maintained efficacy. Packages, machines and methods fully covered by U. S. and Foreign Patents and Patents Pending.



"...packages they reach for"

by America's #1 source for plastic containers

As a manufacturer you reach for Clearsite containers because they come in crystal clear and gem-like colors... because they are flexible or rigid, in the sizes you need, and in the right thermoplastic material for your product... because they ship inexpensively (⅛ the weight of glass) and they are shatterproof. Your label imprinted during manufacturing.

As a consumer she reaches for your product in a Clearsite container because she believes there is an extra measure of value in a product packaged so well.

Celluplastic
CORPORATION
50 Avenue L, Newark 5, New Jersey
representatives in principal cities

Write for samples, write for technical literature today.

Products of endless variety use various types of CLEVELAND CONTAINERS, of which these are typical.

Here are Packages Designed and Produced to Meet the Needs of Each Manufacturer!

That's the Keynote of CLEVELAND CONTAINERS.

You have a product. It requires packaging for one or more dominant reasons . . .

. . . protection against careless handling,

. . . improved appearance that will mean more sales,

. . . the segregation of sizes . . . also for unit sales,

. . . minimum weight in transit . . . and many more reasons.

Then consult . . . CLEVELAND CONTAINER CREATIVE DESIGN DEPT.

Our men are trained through long experience with similar situations to give you correct, constructive counsel . . . entirely without obligation.

Ask us questions . . . and you be the judge . . . as to the value to you of our service.

The CLEVELAND CONTAINER Co.

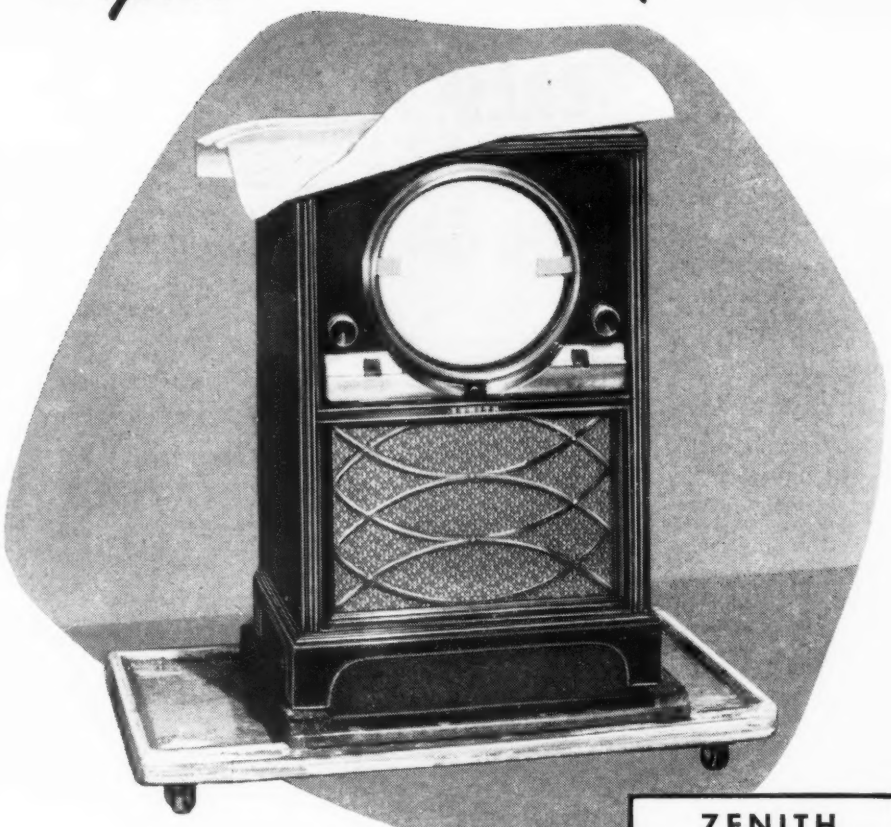
6201 BARBERTON AVE. CLEVELAND 2, OHIO

- All-Fibre Cans • Combination Metal and Paper Cans
- Spirally Wound Tubes and Cores for all Purposes
- Plastic and Combination Paper and Plastic Items

★ ★ ★

PRODUCTION PLANTS also at Plymouth, Wisc., Ogdensburg, N. Y., Chicago, Ill., Detroit, Mich., Jamesburg, N. J.
PLASTICS DIVISION at Plymouth, Wisc. • ABRASIVE DIVISION at Cleveland, Ohio
SALES OFFICES Room 5632 Grand Central Terminal Building, New York 17, N. Y., also 647 Main St., Hartford, Conn.
CANADIAN PLANT The Cleveland Container Canada, Ltd., Prescott, Ontario Sales Offices in Toronto and Montreal

Kimpak Float Packaging*

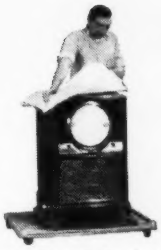


ZENITH TELEVISION

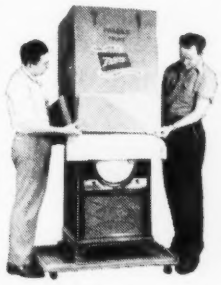
Cuts shipping costs— reduces damage in transit!

KIMPAK creped wadding gives your product better protection, yet saves you money, too! It's strong—to guard the most delicate articles; flexible—to adapt to any product; soft, clean and smooth—to provide the surest protection for finished surfaces! Yes, damage enroute is remarkably reduced with such safe, dependable protection!

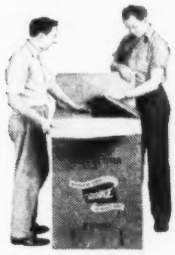
KIMPAK reduces handling costs, because it's so easy to apply and pleasant to handle. And nothing else can equal the eye-appealing neatness of a KIMPAK wrapped product! Investigate now the many advantages of this newer, better packaging material. There's a specification to meet every requirement of the four basic methods of Interior Packaging . . . Surface Protection, Flotation Packaging, Blocking and Bracing, and Absorbent Packaging. For free booklet, send in coupon below.



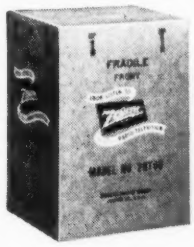
1. Sheet of Kraft-backed KIMPAK is laid over top of cabinet and down sides.



2. Corrugated container is pulled down over KIMPAK-protected cabinet finish.



3. Assembly is up-ended, and container closed tightly at bottom over wood base frame protecting legs of cabinet.



4. Completed shipping package now provides full surface protection for the cabinet from container wall contact.

All photographs courtesy of Zenith Radio Corporation, Chicago, Ill.

Kimpak

REG. U.S. PAT. OFF. & FOREIGN COUNTRIES

A PRODUCT OF Kimberly Clark RESEARCH

CREPED WADDING

*T. M. REG. U. S. & CAN. PAT. OFF.

FREE BOOKLET

KIMBERLY-CLARK CORPORATION MP-549
Neenah, Wisconsin

Please send me free, the illustrated KIMPAK packaging guide.

Name.....

Firm.....

Address.....

City..... *Zone*..... *State*.....

NOW--GREATER STRENGTH AND BEAUTY FOR PLASTAFOL* CARTONS WITH HEAT-SEALING!

We've done it again—to keep you ahead in plastic packaging!

Our famous PLASTAFOL* Cartons—the only clear plastic cartons that *fold flat* for storage and shipment—are now heat-sealed by our exclusive CRYSTOSEEL* process.

To you, this means cartons of superior strength and beauty . . . cartons sealed at the seam into one *solid* piece of clear, top-quality plastic. It's good-bye glue—and in its place a seam you can scarcely see. Crystoseel* is the scientifically controlled way to seal cartons. And it costs you no more.

Look at all the other advantages of PLASTAFOL* Cartons. Check into how they can cut the costs and improve the appearance of your packaging. Write or phone for full information, prices and ideas today!

TROTH·BRIGHT·PAGE
INCORPORATED

Paoli, Pennsylvania. **Phone PAoli 1846**

*Trademark

FACTS ABOUT PLASTAFOL CARTONS

1. Cost less in small sizes than any other rigid plastic carton.

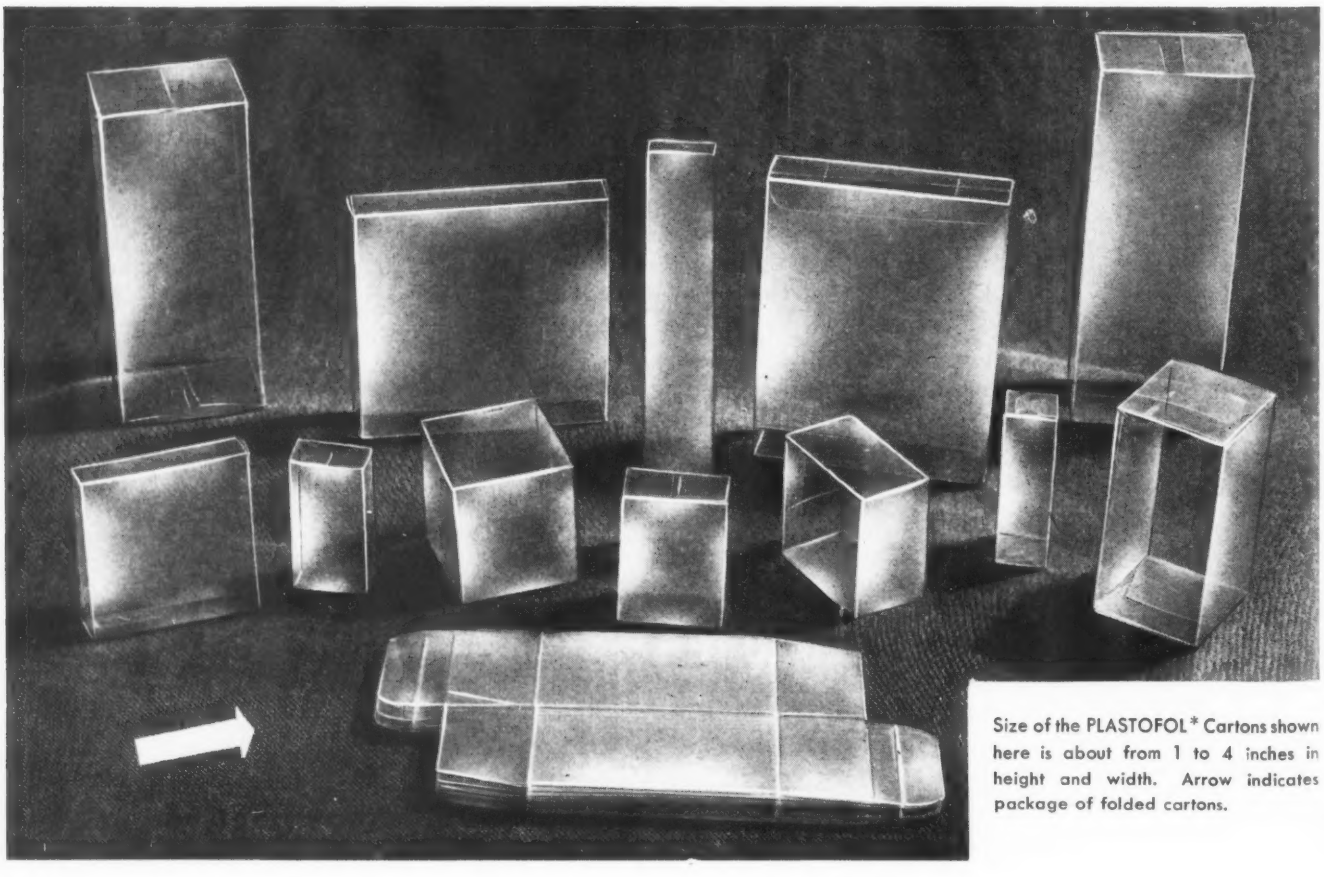
2. Save shipping and storage costs because they *fold flat* (50 or so to the vertical inch!) Fast, easy to set up.

3. Made of beautiful, window-clear plastic of proved durability and strength.

4. Available in a variety of designs and in large runs. Widely used for many types of products, particularly cosmetics.

5. Heat-sealed by CRYSTOSEEL* for strength and beauty.

LOOK AT THE VARIETY OF DESIGNS



Size of the PLASTOFOL* Cartons shown here is about from 1 to 4 inches in height and width. Arrow indicates package of folded cartons.

On the showing of 1948 figures, the "home permanent wave" must have gotten into the hair of beautie shoppe operators with a vengeance. This composite profit-scalp—in terms of outfits sold last year to our sisters and our cousins and our aunts—was better than 50,000,000. Nearly one apiece, we'd say, disregarding repeats.

Even more hair-raising statistics are forecast for '49 by this booming industry. It expects to bring one American female in every three into camp. This feat will require goodness knows how many cubic miles of corrugated cases, to whisk these magic doodads to the distaff market.

MEAD .009 Chestnut Corrugating and Liners can assure them a safe trip from factory to retail outlet. MEAD corrugating is super-strong board—made of chestnut and other hardwood fibres—which has shielded fragile merchandise in transit and handling for more than two decades.

MEAD BOARD IS SOLD DIRECT BY

MEAD BOARD SALES, INC.

3351 MADISON ROAD, CINCINNATI 9, OHIO

Another tough packaging problem solved with VisQueen* film

Stewart-Warner Corporation's Alemite lubrication fittings are standard equipment on practically every passenger car, truck and farm implement you can name. As you'd expect, there's a sizeable market for Alemite replacement fittings. And for years, the Stewart-Warner people have sought the answer to this big question: How can we best display and package our product?

They tried every known method—ranging from counter display cabinets with revolving bins to cardboard cartons. But elaborate or simple—they were *not* the answer to Alemite's problem.

Then they tried Visqueen Film! Strong and tearproof enough to hold the huskiest fittings—transparent enough to display the packages' contents at a glance, Visqueen film looked promising. Thorough testing proved that Visqueen "had it" on every count—including low cost.

Late reports from automotive and farm implement dealers indicate that the new self-displaying Alemite packages are a smashing sales success. And if you'd like to see how Visqueen film's habit of solving tough packaging problems can help you—write us today. Samples of Visqueen film sent on request.

WARNING!

Do Not Confuse Visqueen with Ordinary Polyethylene Film

All polyethylene film is not VISQUEEN. VISQUEEN is the product of years of experience and research on the part of The Visking Corporation, pioneers in the development of this material. Only *VISQUEEN* has the benefit of this rich technical background. Always be sure to specify VISQUEEN Film.

Guaranteed by Good Housekeeping

VisQueen* film . . . a product of

the VISKING corporation

PRESTON DIVISION, TERRE HAUTE, INDIANA

The Visking Corporation, Chicago 38, Illinois, manufacturers of Visking** casings, Visqueen* plastic film and Viskon* nonwoven fabric. Plants in Chicago, Illinois; Terre Haute, Indiana; North Little Rock, Arkansas. **Reg. U.S. Pat. Off. *Trademark

The new 1949 MODERN PACKAGING ENCYCLOPEDIA

for every company that packages a product

9 giant sections
995 pages

A "STEP-BY-STEP" GUIDE

The 1949 Modern Packaging Encyclopedia is new and entirely different from previous editions. It's designed for the specific purpose of showing packagers in every type of business the exact steps to follow in planning and producing efficient, low-cost packaging. Not only does it contain all the standard material of previous editions—condensed, reorganized and brought up-to-date—but it includes more than 50% of completely new information covering every phase of packaging and every type of business.

IT'S EASY TO USE

The 1949 MODERN Packaging Encyclopedia is a practical, easy-to-use handbook. The new step-by-step arrangement of the nine big sections covers every stage in the planning and production of successful packages and covers them in the same sequence you yourself should use.

COVERS EVERY TYPE OF BUSINESS

Regardless of the kind of product you make or sell, there's invaluable information in this book for you on the kind of packaging that's most suitable for your product. A special new section analyzes the basic packaging problems of the seventeen major product classifications including foods, toys, beverages, cosmetics, drugs, chemicals, oils, hardware, textiles, novelties, jewelry and many others.

LANGUAGE IS CLEAR, NON-TECHNICAL

The text has been edited and written especially for the reader and user of the book. All the technical terms understandable only to specialists in special fields have been eliminated. Every sentence has been checked to make sure that people in any line of business can understand it—clearly, quickly and without ambiguity.

ALL THE LATEST DATA

You'll find descriptions of every recent development in the packaging field: materials, techniques, package forms, machines and equipment. There's comprehensive coverage of the latest types of displays, the newest kinds of packages and containers, 49 all-new packaging machines, as well as a complete picture gallery of all types of closures.

NO OTHER SOURCE FOR THE INFORMATION

The 1949 Modern Packaging Encyclopedia is the only reference book which covers all phases of packaging. It is of such complete scope and the information is of such superb quality that you really must buy and use it before you can appreciate its value. By using this book you can acquire a thorough knowledge of every packaging development and technique known to modern industry.

SEND ORDER NOW FOR YOUR COPY

PACKAGING CATALOG CORP.
122-K E. 42nd Street, New York 17, N. Y.

GENTLEMEN:
Yes . . . I need a comprehensive step-by-step guide to package planning and production. Please send me ..... copies of the 1949 MODERN PACKAGING ENCYCLOPEDIA @ $6.50; Canada $9.00, including duty and postage; Foreign $11.00.

☐ Remittance Enclosed ☐ Bill Me

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City.....Zone.....

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PACKAGING CATALOG CORP.
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metal containers.....

....are the spice of life for *candy*

and-

we also manufacture all types and sizes of containers for any purpose — with a personal interest in designing an attractive package to meet your needs.

Quality OLIVE CAN COMPANY *Service*

MANUFACTURERS • DESIGNERS
PLAIN • DECORATED • LITHOGRAPHED
METAL CONTAINERS
450 N. LEAVITT ST., CHICAGO 12, ILLINOIS

Three of Nine Cannon packages produced by Milprint. (Printed 450 MST Cellophane)

Milprint packages help boom CANNON sales

BEAUTY, quality and value make Cannon towels, washcloths, sheets and pillow cases fast sellers in any store.

But Cannon started extra sales booming by putting their products in the year 'round gift class with handsome printed cellophane packages by Milprint.

Whether your product is glamorous and useful or just plain useful Milprint can design and produce a package to help boost it above the so-so seller class.

Call your local Milprint man or write today. Using the services of the nation's foremost packaging experts and designing staff costs you nothing extra — but it pays off in extra results.

no other service like this

In addition to sales sparking packages Milprint will plan and produce your lithographed displays, booklets, car cards and other printed promotional material. Use Milprint's "Follow Through" service.

1949

Milprint INC.

PACKAGING MATERIALS • LITHOGRAPHY & PRINTING

GENERAL OFFICES, [illegible] WIS. • SALES OFFICES IN ALL PRINCIPAL CITIES

Printed Cellophane, Pliofilm, Acetate, Foil, Glassine, Plastic Films, Lithographed Displays, Printed Promotional Material

For the first time in U. S. A.!

Revolutionary Package and Packaging Machine

Pulling tab tears upper flap along the score line.

Partly opened package shows reclosing tongue.

Coffee being poured out of the foil-lined package.

Tongue tucked in slot for a tight reclosure.

PHOTOGRAPHS COURTESY MODERN PACKAGING

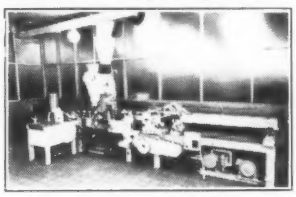
CER-A

This unique package opens up new merchandising and new selling points for carton-packed products . . . The package is SIFTPROOF . . . HERMETICALLY SEALED . . . RECLOSABLE. This reclosable feature keeps your product fresher or more appealing in a virtually air tight package DURING consumption period of your product.

Folding box and liner, manufactured in USA, provide for the first time a siftproof, air tight, reclosable package at low cost.

Semi-automatic and fully automatic machines are available for carton users.

See article April issue Modern Packaging or write for details.



Model F-23 Full Automatic

PACKAGING Industries, INC.

50 CHURCH STREET

MONTCLAIR, N. J.

Designers • Consultants • Equipment

Use this yardstick to measure the effectiveness of your package

Today keen merchandisers find that these three considerations make an accurate yardstick for measuring effective packaging.

Consider the shopper. In this modern era of impulse buying, the transparent package lets shoppers see the product's value—persuades them to buy.

Consider the product. Different products require special types of protection. The packaging material should be tailored to suit a product's individual needs.

Consider the cost. It's important today to use a packaging material that not only attracts and protects but also does the job economically . . . and operates efficiently on automatic packaging machinery.

Our field representatives, and the converters of Cellophane, will be glad to assist you in developing effective packaging that incorporates these three basic points. E. I. du Pont de Nemours & Co. (Inc.), Cellophane Division, Wilmington 98, Delaware.

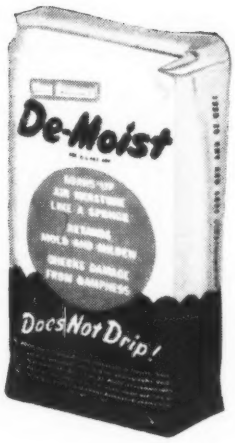
DuPont Cellophane

Shows what it Protects—Protects what it Shows . . . at Low Cost

DU PONT

BETTER THINGS FOR BETTER LIVING
. . . THROUGH CHEMISTRY

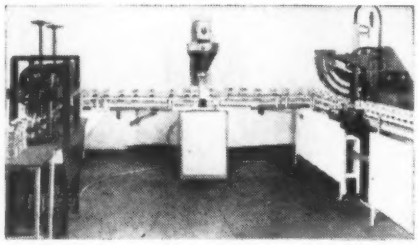
Q: WHAT ALL-IMPORTANT FEATURE DO THESE BAGS HAVE IN COMMON?



A: THE UNIQUE, FOOD-PROTECTING ABILITY OF BETNER PATENTED THERMOSEAL* BAGS!

Our demon statistician, trying hard not to show bias, has figured that just about 20% more protection is given by Betner Thermoseal* Bags.

If he is very far wrong, we'll hear from our competitors. If he is close to right, we should be hearing from you. Because—any food processor who is proud of his product, who wants it delivered to consumer in the best possible shape, won't be happy 'til he knows all about Thermoseal*, the heat-sealed bag.



Bag inserter, filler and heat sealer for filling and closing bags in cartons.

Those five products shown above —and a raft of other eminent U. S. foods are bodyguarded from plant to pantry by Thermoseal*. If you'd like a package for *your* product that is sift-proof, moisture-vapor-proof, that keeps insects *out* and flavor *in*, ask us about Thermoseal*.

*Trade Mark Reg. U. S. Patent Office

Benj C Betner Co DEVON, PA.

BENJ C BETNER CO of CALIFORNIA, LOS ANGELES, CAL.

A complete bag service—from idea to finished bag to machinery for closing coffee bags and filling and closing liner bags for cartons.

The right ink smooths the way to successful packaging

It is quite likely that your package will travel a very rough handling road from the time it is printed until it reaches milady's market basket. Thus it is essential that careful attention be given to these fundamental features so important in the successful production of printed packaging material: design, stock, color and INK. The use of the right ink and suitable color can help your package to:
stand out and attract the buyer's eye;
stand up under the wear and tear of modern distribution methods.

Investigate the properties and possibilities of the many types of ink available for package printing. You will find that General Printing Ink has a right ink for each particular job.

INKS FOR ALL PROCESSES

Hydry Moisture-Setting Ink
Hard-Tex Metal Decorating Ink
Silversheen and Goldsheen Inks
Glostone and SUveneer Inks
Rotogravure Inks
Textile Bag Inks
Specialty Inks

AND ALL PRODUCTS

Cartons • Containers • Bags
Labels • Wraps • Package Inserts
Boxes • Waxed Paper
Collapsible Tubes

GENERAL PRINTING INK COMPANY

DIVISION OF SUN CHEMICAL CORPORATION

10TH STREET & 44TH AVENUE, LONG ISLAND CITY 1, N. Y.

Offices in Principal Cities

GEO. H. MORRILL CO. • SIGMUND ULLMAN COMPANY • FUCHS & LANG MANUFACTURING COMPANY • EAGLE PRINTING INK COMPANY
AMERICAN PRINTING INK COMPANY • E. J. KELLY COMPANY • GENERAL PRINTING INK CORPORATION OF CANADA LIMITED

NO matter the product, we would like to talk over your packaging plans with you. Heekin Metal Lithography has been famous since 1901. That's a pretty good recommendation in any business. Let Heekin cans sell for you.

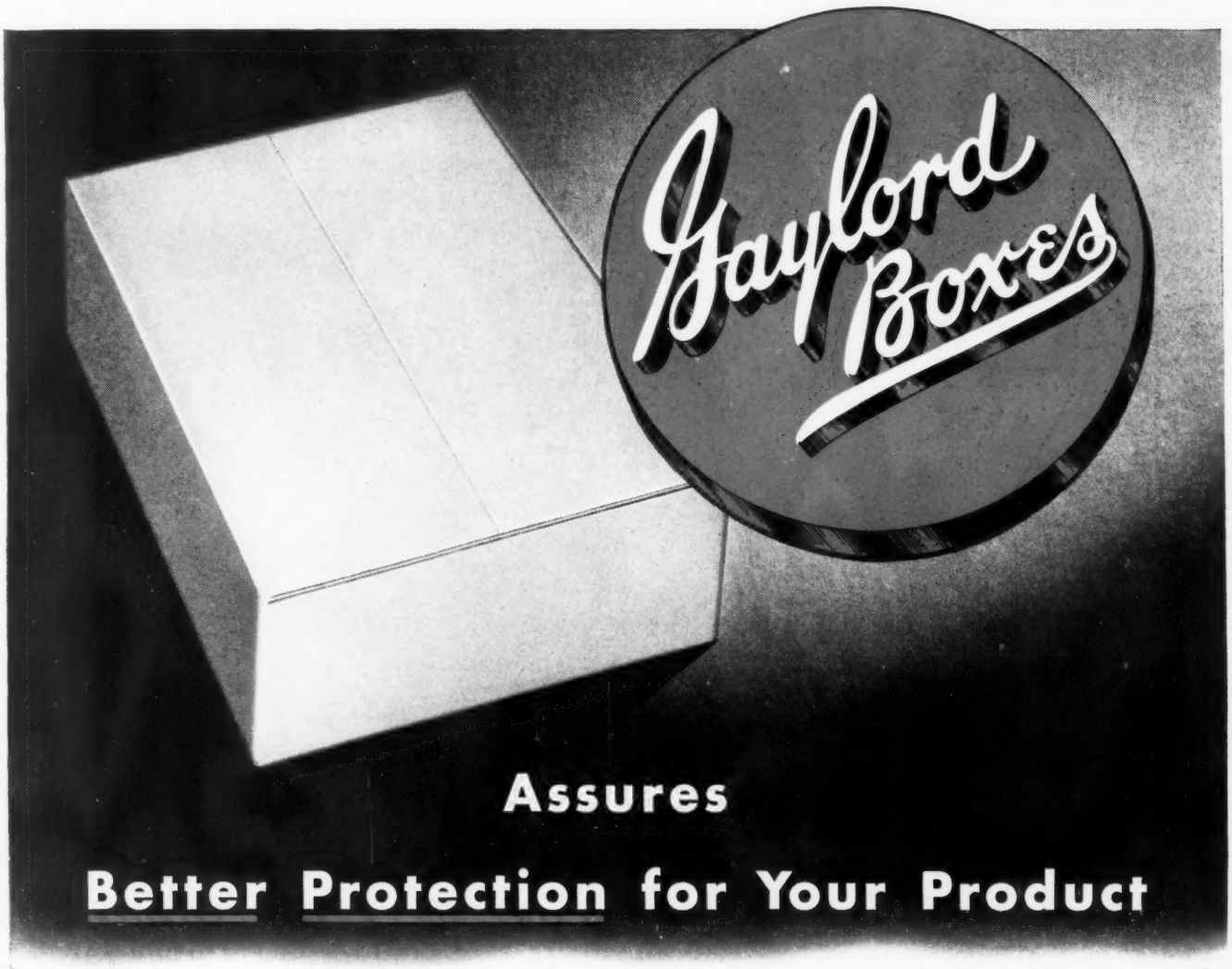
HEEKIN
LITHOGRAPHED CANS

Expert Color Reproduction on Metal Since 1901

THE HEEKIN CAN CO. CINCINNATI 2, OHIO

ALL SORTS OF LITHOGRAPHED CANS FOR ALL SORTS OF PURPOSES

The Reserve Strength Built Into



To minimize the chance for damage in shipping, and to create good will with your customers, take advantage of the extra strength found in Gaylord Boxes.

Rigid standards that demand superior raw materials and continuous quality control through every step of manufacturing give Gaylord Boxes that reserve strength so important to the safety of your product.

You'll find Gaylord Sales Offices in the cities listed below ready to help you solve your packaging problems. Call the one nearest you.

GAYLORD CONTAINER CORPORATION General Offices: **ST. LOUIS**

- Corrugated and Solid Fibre Boxes
- Folding Cartons
- Kraft Grocery Bags and Sacks
- Kraft Paper and Specialties

New York • Chicago • San Francisco • Atlanta • New Orleans • Jersey City • Seattle
Detroit • Indianapolis • Houston • Los Angeles • Oakland • Minneapolis
Jacksonville • Columbus • Fort Worth • Tampa • Cincinnati • Dallas
Des Moines • Oklahoma City • Greenville • Portland • St. Louis • San Antonio
Memphis • Kansas City • Bogalusa • Milwaukee • Chattanooga • Weslaco
New Haven • Appleton • Hickory • Greensboro • Sumter • Jackson • Miami

A Crown Belief —
"Progress depends on New Ideas and Improved Service"

Modern Marvel of the Can World

CROWN'S NEW PROPULSION CAN

Just Press Top and Contents

S-P-R-A-Y-S Out!

After years of popular thinking that "cans are just cans," along came Crown with a revolutionary new type of can which dispenses Whipped Cream, Plastic Coatings, Insecticides, Deodorants and other products under pressure. Crowntainer's patented no-side-seam, no-top-seam construction is ideal for pressure use. Would this can improve sales for your product? Ask to have a Crown Sales Representative call.

One of the World's Largest Can Manufacturers **CROWN CAN**

PLANTS AT PHILADELPHIA, BALTIMORE, CHICAGO, ST. LOUIS, HOUSTON, ORLANDO • ***Division of the Crown Cork and Seal Company***

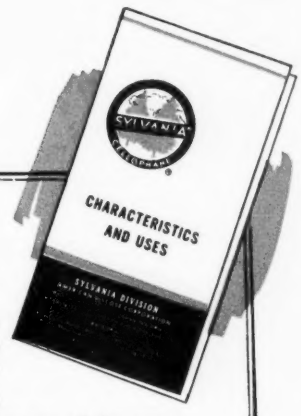
Visit the AMA National Packaging Exposition—Atlantic City Auditorium — May 10th to 13th.

THERE'S A SYLVANIA CELLOPHANE TO FIT YOUR PRODUCT!

Name your packaging requirements. Whatever your product, there is a member of the Sylvania family of cellophane to meet its needs.

Here under one name is a whole group of packaging materials each with its own combination of properties. Sylvania Cellophane is made with controlled degrees of moisture protection. It is available in different weights—with or without heat-sealing—for hand wrapping or high speed application on automatic machinery. All are truly transparent . . . offer extra visibility and the gleaming beauty that means extra sales appeal.

Talk over your packaging problems with the Sylvania representative. He'll help you determine the combination of properties needed for your product.



KNOW YOUR CELLOPHANE!

The booklet, "Characteristics and Uses of Sylvania Cellophane," fills a long felt want in the packaging field. Here are all the essential facts you need to determine the proper use of Sylvania Cellophane. Basic data on types, weights, protective qualities and recommended use is given in concise, easy-reference style. Write for your copy today. Address Market Development Department MP-5.

SYLVANIA CELLOPHANE

SYLVANIA DIVISION AMERICAN VISCOSE CORPORATION

Manufacturers of cellophane and other cellulose products since 1929

General Sales Office: 350 Fifth Avenue, New York 1, N.Y. *Plant:* Fredericksburg, Va.

SYLVANIA CELLOPHANE®

You can weigh the advantage

Cans are light.

Now, just weigh the advantages of this simple fact.

Their lightness often means lower shipping costs. But it also reduces trucking and shipping costs of the wholesaler and jobber.

The lightness of cans makes the journey from the back room to the display areas in a grocery store an easier one, too.

That's but one of the advantages which tips the scale in favor of metal containers.

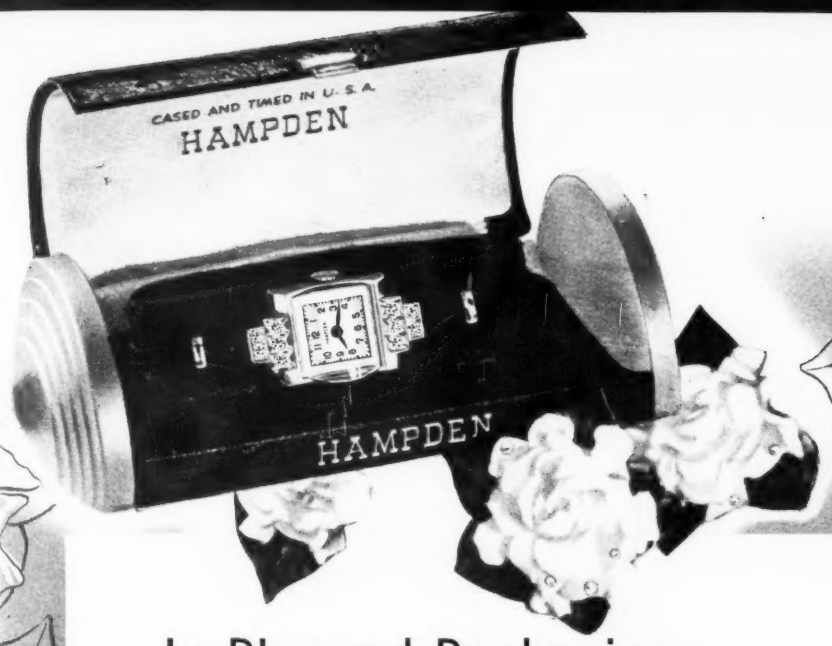
AMERICAN CAN COMPANY

New York • Chicago • San Francisco

This trademark CANCO *is your assurance of quality containers. Look for it!*

FIVE OTHER WAYS CANS WORK FOR SALES AND PROFITS

1. **Cans are break-proof.**
2. **Cans protect contents against light, air, insects, and moisture.**
3. **Cans are *compact*—mean more storage and display space.**
4. **Cans are tamper-proof.**
5. **Cans are easy to open and dispose of.**



In Planned Packaging

YOUR PRODUCT SAYS

"Take Me"

Only a package designed expressly with your product in mind can achieve maximum attention and *impulse to buy*.

Farrington design artistry, volume production and modern methods can create a *Planned Package* for your product at a price you wouldn't guess possible.

Your fine product is deserving of our earliest consultation.

FARRINGTON MANUFACTURING COMPANY

GENERAL OFFICES: 80 ATHERTON ST., BOSTON 30, MASS.
CANADIAN PLANT: FARRINGTON MFG. CO., LTD., 1191 BATHURST ST., TORONTO 4

PECIALTY BOXES . DISPLAY TRAYS . METAL SPECIALTIES . CHARGA-PLATE SERVICE

Mr. Tomlinson adds "We have been using the paper in conjunction with New Jersey Machine Corporation's Pony Label-Dri. It is not necessary to watch the consistency of the glue nor make the many time-consuming adjustments during the day which we had to do heretofore. It has also eliminated the set up period in the morning and clean up time at night. The total result has been a much greater running time for our production line, with the consequent saving to us, and more effective use of our production line crew."

Hexol's experience with *Pervenac heat seal label paper is typical. If your package is wet or dry glass, paper, film, enamel, plastics or metal—investigate *Pervenac for fast initial tack, precise registration, permanent adherence and other advantages that speed production and cut costs! Write Nashua's Sales Research Department for samples.

*Trade Mark (Formerly Thermo-Kote)

NASHUA GUMMED AND COATED PAPER COMPANY
NASHUA, NEW HAMPSHIRE

NASHUA
MAKES PAPER MAKE MONEY FOR YOU

Modern packaging

Vol. 22 No. 9 May 1949

Gift trends

THERE'S A GOOD YEAR AHEAD FOR PACKAGERS OF GIFT ITEMS WHO ARE AWARE OF CORRECT UNIT PRICING AND CAN PLAN BEST SELLERS

This year is going to be a glamour-plus year in gift packaging—and we mean glamour *plus* the fundamentals of good sound salesmanship. It won't be easy.

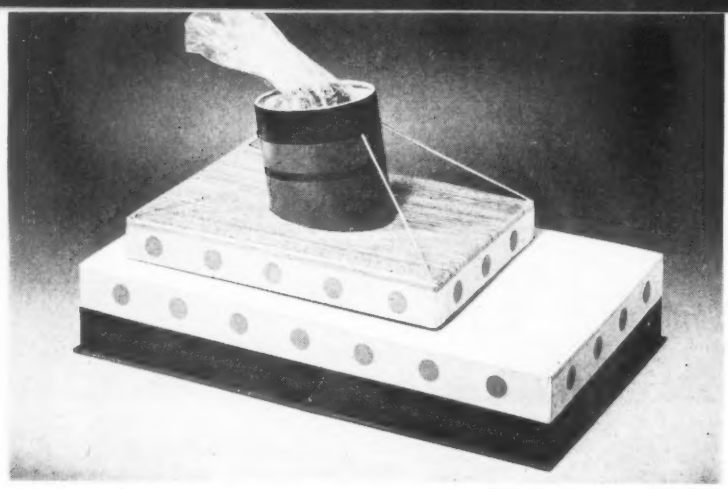
Package presentation obviously is one of the dominant factors in selling merchandise as gifts, but glamour alone is not going to clinch the sales.

Every manufacturer who is planning gift packaging for 1949 must bear in mind two very important conditions which will affect his gift package planning:

1. Retailers have an eye out for best sellers and buyers are leary of stocking anything that might be a slow mover. This is a new condition, because for nearly a decade almost anything would go.

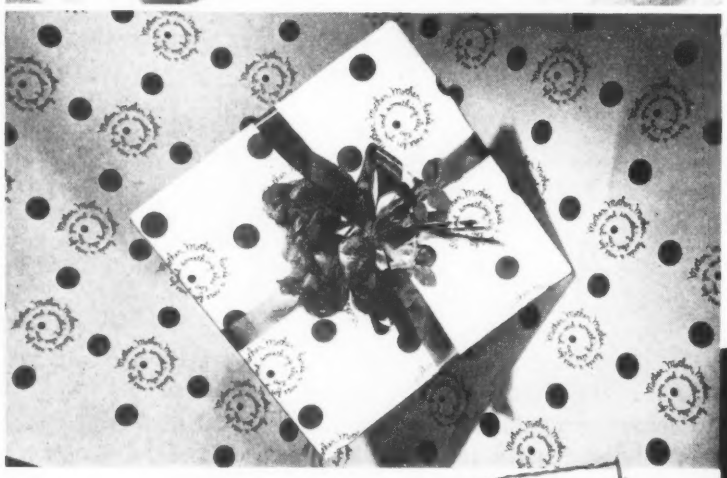
2. Retailers are keenly aware of correct unit prices. Retailing publications are full of examples that show how good items have been priced out of the market, above the price levels that people were willing to pay. As these items drop in price, or are sold in smaller units, they again become big volume sellers. And today, every merchant's problem is to increase volume to offset the cost of doing business.

Said G. W. McCormick, assistant sales manager of the G. C. Murphy chain, at the recent *Variety Merchandiser* clinic in New York: "Our firm showed a sales increase of 15.25% for the past year. Close to 30% of this added volume was expended in direct cost to achieve it. This was the result in spite of our efforts to practice every possible means of economy—and now our statistical department tells us that another 13% in sales



BON VOYAGE package currently used by Rosemarie de Paris is set-up box. "Lower decks" contain chocolates and cookies. "Upper deck," covered with wood-grain paper, simulates wood planking, holds cheese sticks. "Smoke stack," striped in authentic Cunard stripes, holds cellophane-wrapped hard candies. Portholes are strips of polka-dot stock paper.

GIFT OVERWRAP of printed cellophane makes a Mother's Day gift of Norris, Inc., chocolates. Theme of the overwrap is pink carnations on background of blue. Wrap combines brand identity, personal greetings and seasonal display.



MOTHER'S DAY wrap of distinctive design in green and white, tied with green ribbon and decorated with a red rose, tying in with theme, "Mother, Mother, Mother, here's a rose for you," resulted in record business to Joseph Magnin Co.

EASTER PROMOTIONS are important selling aids to the cosmetic industry. This clever Lentheric Bunny package is a round set-up box with specially printed wrap and shiny paperboard ears inserted through box top. Inside disk keeps the insertions from showing inside. Base of the box is covered with silver foil.

INTERIM GIFT PACKAGING THE YEAR-ROUND

BIRTHSTONE FLACONS of perfume provide interesting year-around gift packaging idea introduced by Gourielli. Flacons may be pins, or they may be secured to a bracelet. Pins are sold with matching lipsticks. Each is presented in a set-up box with a die-cut platform.

volume is necessary to offset costs to a point where we can enjoy the same earnings as last year."

Such instances are found in every type of retailing —from the large department store to the corner drug store.

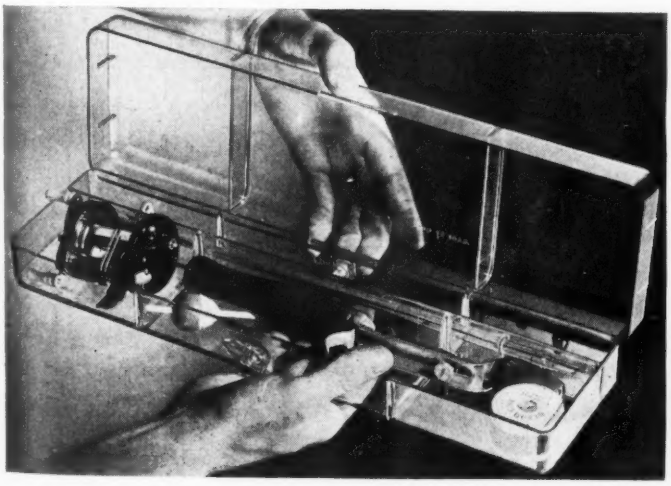
Gift packages this year, therefore, must be planned for fast selling and correct pricing. The list of products which can be profitably gift packaged is endless, but in every case, current merchandising practice must be studied carefully and the package planned to meet today's market requirements. This is even more essential in such traditional gift lines as cosmetics, confections, stationery, tobacco, hosiery, lingerie, fountain pens and pencils, household appliances and jewelry, where competition for gift sales is always greater.

Confectionery is a particularly good example. Many leading firms whose candy prices have gone over a dollar a pound have discovered that popular demand is for boxed candy selling for a dollar and under. Therefore, a number of firms are putting up boxed confections in 12-oz. units selling for less than a dollar to meet this demand. Since a large proportion of boxed candy is purchased for gifts, this is significant.

Conversely, where a profitable combination gift can increase the unit of sale, some manufacturers have packaged merchandise in sets or multiple units. The cosmetic and toiletries set box is an outstanding example of this practice. One firm this year is presenting a set of three belts in a transparent package promoted as a complete belt wardrobe. Several lingerie firms are beginning to use the matched-set packaging idea. A combination idea for men's wear was originated by J. Blach & Sons, Inc., store in Birmingham, Ala. The idea is a package insert, made as a die-cut paperboard platform, called "Ensemble Harmonique," which fits into the store's regular shirt box, but is designed to hold in the box a matching tie, socks and handkerchief. The store can assemble its own stock and thus present it in a beautiful gift package and achieve a sales unit for three items. The idea has proved so successful that J. Blach & Sons are selling the inserts to other stores throughout the country. The same principle could be applied in countless other popular gift items to encourage a combination sale.

As business competition increases, more attention is

FATHER'S DAY promotions in Associated Merchandising Corp. stores this year will feature three exclusive gift wraps for customers purchasing Father's Day gifts. The wraps of wood-grain or reptilian leather-grain papers will feature aluminum foil and acetate-laminated bands with leatherette buckle simulating a belt, or a metallic cornflower boutonniere. "Belts" are prefabricated by the supplier from rolls as shown at left in yard lengths, ready for application (right). The whole packaging story will tie in with store displays.



FISHING KITS of injection-molded transparent acetate provide extra incentive for buying because the package is an excellent tackle box that will not corrode. Ocean City Mfg. Co. uses this box for a low-cost fishing outfit for beginners. Dividers keep all elements in place. The long narrow compartment holds fishing-rod segments and the three smaller ones hold the fishing reel, handle and accessories.

EASTER HAM in a special gift carton is a new idea launched this year by Armour. Designed in Easter-egg colors, the package makes a display for canned, ready-to-eat hams and shows how family motif can be worked in with decorative treatment. Cartons may be removed after Easter.

BATH BUNNY set is transparent acetate box contains wash cloths shaped around cotton wadding to look like a rabbit and 3 soap "eggs." Package increased sales for Mem Co., Inc.

BELT WARDROBE is provided by this combination package attractively constructed with acetate cover and paperboard base. It sells as a gift unit three belts—one for dress, one for office and one for sport—neatly arranged in a visibility package promoted as a "complete belt wardrobe."

THREE CROCKS of cheese in a painted wire frame become a combination gift item when packaged in this round re-use box with cord handle suitable for a sewing or travel cosmetic kit.

paid to every aid that means more sales. Gift packaging is one of those aids. All indications are that every manufacturer whose products are purchased as gifts began his planning of this year's gift packaging almost immediately after the past Christmas season was over. MODERN PACKAGING's Reader Service department has been busy since the first of the year answering inquiries about gift packaging supplies and ideas. Leading cosmetic firms told us they had plans for the 1949 Christmas season well in hand before the first of March. A packaging man for one of the big-five tobacco firms said if his 1949 Christmas gift packages were not ready by May 1, he'd better be looking for a new job.

Interim gift packaging

In the planning, however, is a notable trend. More and more gift packages appear to be planned for use in year-around selling. Some are regular stock packages dressed-up with a special gift wrap or outer sleeve that can be removed after the special seasonal gift promotion is over and the merchandise returned to regular stock, thus avoiding returns. Other gift packages are designed for year-around selling, notably items that would be sold as baby, graduation, wedding, hostess gifts or small items suitable for bridge prizes.

In addition to all this, there appears to be more emphasis on the packaging of what is called the "interim gifts"—that is, Valentine, Easter, Mother's Day, graduation, weddings, birthdays, hospital, vacation souvenirs of local geographic interest, bon voyage, etc.

It has been pointed out that few industries have capitalized on the interim occasions for packaging as have the confectioners and florists. According to *Drug and Cosmetic Industry* magazine, "the orchid industry, without a heavy reliance on Christmas, has grown so rapidly on an almost entire gift basis that the dollar volume sold exceeds the volume of (perfume) fragrances."

Jewelers, by adopting special gift packages such as the plastic graduation-hat container (see "Mortarboards For Keeps," MODERN PACKAGING, May, 1948, page 142) have greatly capitalized on interim occasions. Chain and variety stores are finding out that well packaged toys promoted the year around help to level off the toy business from 78% during the few weeks before Christmas to 65% at the rush season (see page 92, this issue).

Success in these fields should lead many manufacturers to study the possibilities of interim gift selling as an added profit aid. Creative thinking in package design and united promotional effort could be a strong force in developing greater volume through interim gift selling and new ideas in gift items.

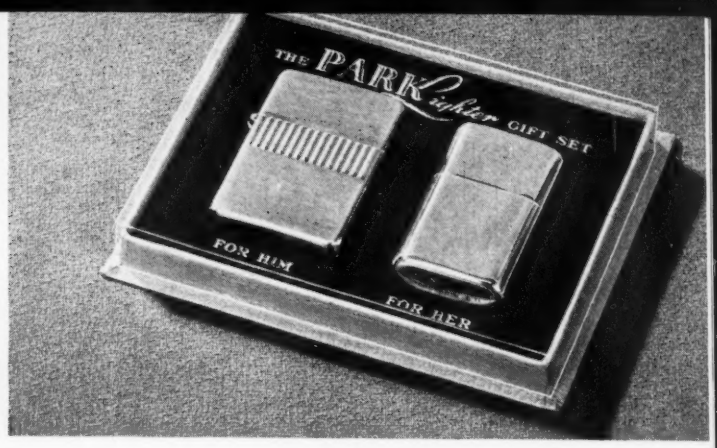
Supply situation

Not since before the war has the gift packaging supply situation been so favorable. Practically every kind of packaging material may be had—at a price—and in almost every case shipments can be assured on schedule. Most suppliers say there is not much chance for immediate relief in prices, with costs of labor and basic materials still high—unless the situation gets really tough and drastic price cutting begins.

Decorative papers

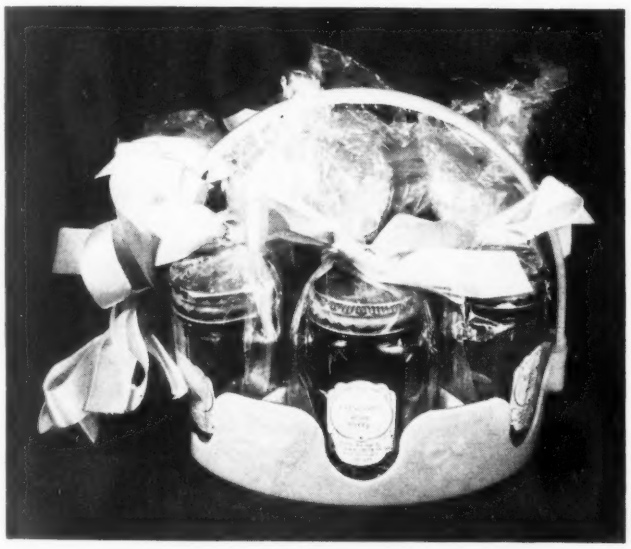
In the fancy paper field there is growing demand for exclusive and private designs, particularly in the department and specialty store field. Stores from coast to coast, even the smaller ones, are aware that a distinctive gift wrap is a walking advertisement wherever it goes. Other specialized designs are appearing in tissues, protective papers, foils, etc., for inner wraps in the packing of cosmetics, candy and foods. A number

NEW PRICE trend is indicated by this Mother's Day promotion—a combination package for Schiaparelli Shocking soap—three large cakes in a handsome gold and shocking pink gift box selling for $5. Individually boxed, the soap formerly sold at $2.25 each. Thus the presentation represents a worthwhile concession by the cosmetic house.



FOR A COUPLE—a combination lighter set "for him" and "for her" provides an interesting double-selling idea. Transparent package conveys the idea quickly when on display. Base is of set-up paperboard construction and is fitted with a drawn acetate cover. The two lighters rest in die-cut platform. Lettering provides brand identification.

COMBINATION GIFT PACKAGES INCREASE THE SALES UNIT



HOSTESS TRAY of polystyrene, with handle, creates a combination container for an assortment of Wm. A. Greca Co., Inc., jellies and preserves that can go right on the table. It has real sales appeal in specialty food departments.

of paper firms report increased capacity and improved printing equipment, such as multi-rotary presses, aniline, intaglio and embossing equipment.

Lithographers who supply the gift packaging field also report growing interest in exclusive wraps and printed box-covering materials.

Design themes show wide variety with perhaps a leaning, in quality lines, toward pastels, Victorian motifs and the romantic feeling as expressed by today's fashions. The good old traditional greens and reds with holly and Christmas trees are still strongly preferred for mass-market usage, much to the dismay of leading paper designers who feel that both users and suppliers are missing a bet by not trying the newer, more

ENSEMBLE HARMONIQUE is the name given to this unusual die-cut insert for shirt boxes which provides a clever means for creating a combination gift of a matching shirt, tie and handkerchief right from a store's own stock. The inserts are sold on a franchise basis to any store.

USEFUL IDEAS FOR MANY LINES

INDUSTRIAL GOOD-WILL GIFTS for the press and other company friends take serious planning by the packaging departments of large manufacturers. For the second season, Sunshine Biscuits, Inc., puts an assortment of its products in a transparent acetate hat box.

PLASTIC LACE is one of the newest decorative packaging supplies — a non-woven fabric made in both ribbon form as shown here, and in sheets. It comes in a variety of colors, won't unravel, can be cut, stitched, hand sewn, tied—even washed.

sophisticated designs even in the lower-priced brackets. They argue that the public is becoming sophisticated and that the time will come when the paper converters and set-up boxmakers will have to take cognizance of such preferences if they are to keep their share of the packaging business.

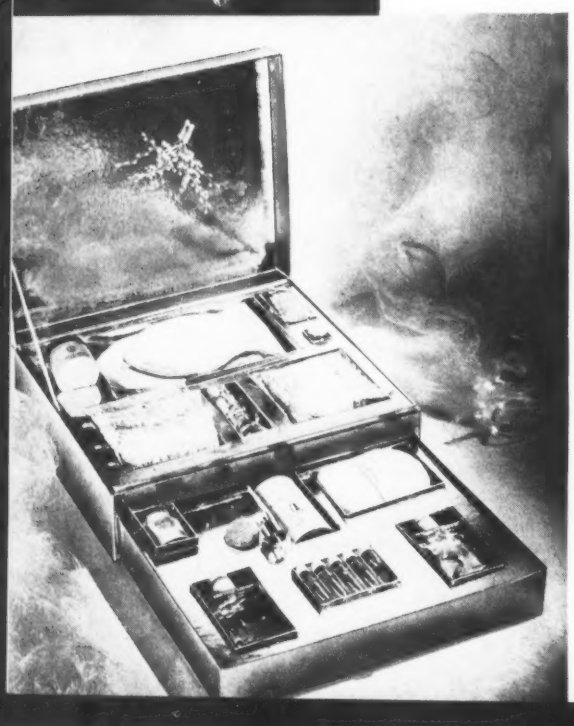
Plain colors in high fashion shades as well as wood and leather grains and flocked materials are all in strong demand. There is a trend toward high gloss finishes which resist dirt and shopwear and also enhance the appeal of the item.

Plastic packaging

The user of plastic packages has a wider selection than ever before. Faster methods of producing all types of rigid transparent boxes are bringing these containers within easy reach of all those who know the value of the see-through package. Many of these packages are combined with other materials, such as bases of paperboard, paperboard with metal or leatherette trim. Several firms have stock designs available for the jewelry, confectionery, textile and other fields. One interesting idea is a collection of stock gift boxes for hard candies, nuts or fruit cakes, made with metal base. The unique feature is a transparent pocket on the inside of the transparent cover in which the purchaser may place a personally written greeting card on which is the name of the recipient.

We will probably see also a wider use of molded plastic containers this year, in both opaque and transparent materials. Such containers are particularly effective for jewelry, hobby tool kits, fishing gear, razors, etc. Probably on the counters this year also will be the molded self-hinged boxes of polyethylene that feel like leather and are as strong as hard rubber.* These have possibilities in the cosmetic as well as the jewelry field.

* See "Polyethylene 'Soft' Box," MODERN PACKAGING, March, 1949, p. 97.



PRESTIGE is an essential intangible to the quality cosmetic firm. Despite the trend to volume items, Mary Chess continues her luxurious Silver Chest. Priced at $62.50, it is intended for a special bridal promotion. The all hand-made, silver foil-covered box is comprised of 200 separate pieces of board and paper.

BAKED IN THE BOX, these fruit cakes made by Nulomoline Co. go right to consumer in lithographed metal containers.

One unusual gift package containing an assortment of jams and jellies is a molded polystyrene tray with handle, suitable for use right on the table.

Films and foils

Colorful, paper-backed aluminum foils and all the transparent films are staunch favorites for gift packaging. The former will be used widely as a wrapping material, particularly in the cosmetic and confectionery field, where regular stock packages can be dressed up for the holiday season. The protective films such as Pliofilm, saran, polyethylene and special cellophane will find their way to dress up holiday turkeys and chickens.

Metal containers, glass and pottery

Newest wrinkle in metal gift boxes is the lithographed container for fruit cakes in which the cakes may be baked after packaging. Experiments made by the testing bakery of the Nulomoline Co., New York City, show that there is no marring of the containers in this procedure and that by eliminating baking pans, all the handling required to take the cakes out of baking pans and placing them in retail packages is eliminated.

Private-mold glass and ceramic color labeling will enhance the beauty of many glass packages and offer many possibilities in the perfumery field. Here and there, one will see this year a few perfumes in imported glass containers of unusual design.

The classic beauty of pottery will continue to enhance the specialty packages of cheese, honey, maple syrup and many other food specialties.

Ribbons, tapes, decorative embellishments

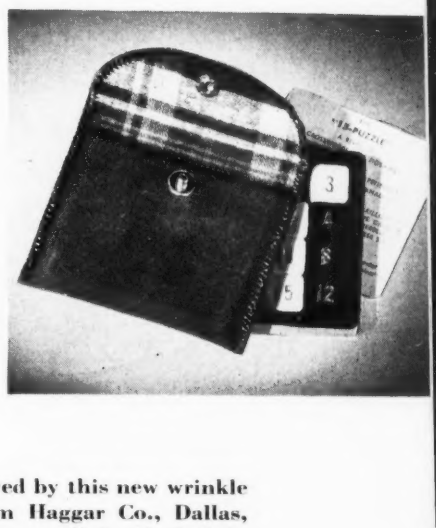
Newest of the decorative materials is the plastic lace used successfully by Hattie Carnegie on her spring cologne promotion.† This lacy material comes in a variety of colors and designs and is supplied in rolls or sheets, easy to handle.

Among the ribbons and tapes are all of the rayons, rayon and acetate laminated ribbons, metallic cords, non-woven textile ribbons, as well as many varieties of cellulose tape. Many of these are now printed for special occasions—Christmas, (*Continued on page 187*)

† See MODERN PACKAGING, March, 1949, p. 104.

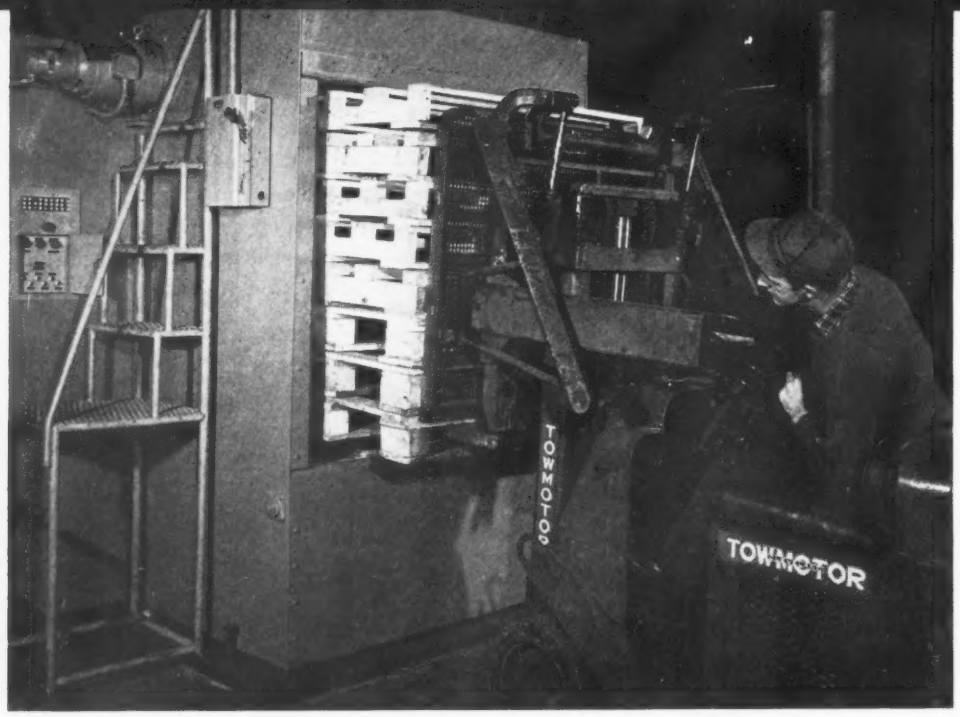
LAMINATED WINDOW CARTONS made of printed cellulose acetate and paperboard bring appetite appeal to holiday fruit cakes. This Life Fruit Cake put out by Hathaway Bakeries, Inc., of Cambridge, Mass., is first wrapped in cellophane and then decorated with ribbon and holly, which show through the window.

NOVELTIES require careful planning for attractive presentation. An example is this mathematical puzzle made of plastic, packaged in a brown sueded, plaid cotton-flannel lined envelope with a metallic clasp.



IMPORTS sometimes bring novel design ideas. Here is a package that Gi. Vi. Emme has created for introducing its "Insidia" perfume from Italy. The perfume is in a strikingly designed dagger-shaped bottle. Each of the bottles is registered and numbered. The box is a hinged tube, fitted with a metal clasp, covered with velvet and lined.

SIZE PROBLEM is solved by this new wrinkle in gift certificates from Haggar Co., Dallas, Tex.—a miniature box, called Slack-Pak, containing an illustrated label of a pair of slacks, which takes the place of miniature slacks that would be difficult to produce.



EMPTY PALLETS of "take it or leave it" type being loaded into pallet magazine of automatic pallet loader at Roman Cleanser plant. As each pallet load is completed and ejected from machine, a new pallet is automatically raised into position.

Automatic palletizer

IT SPEEDS PACKAGE PRODUCTION,

SAVES TIME AND LABOR, VIRTUALLY ELIMINATES DAMAGE TO CASES AND BOTTLES

In plants where operations include the filling of liquid products in glass containers, a high degree of integration between filling, capping and subsequent handling of the bottled products is imperative to attain peak efficiency.

The problem of handling the bottles after filling is intensified by the relative weight of the containers and the fact that breakage usually means loss of valuable product and delays on the filling line.

After the filled containers have been placed in their shipping cases and sealed, cases must be removed from the lines promptly for storage or shipment. If this phase of the packaging operation cannot keep pace efficiently with the filling lines, the entire procedure is handicapped. Particularly when the packed cartons are heavy, manual handling of cases off the production line may result in worker fatigue, irregular stacking of the containers on pallets and occasional dropping and breakage.

Roman Cleanser Co., Detroit, whose products include three types of household bleaching and cleaning preparations put up in quart, half-gallon and gallon glass containers, has recently stepped up the efficiency of its entire production line through the installation of two automatic pallet-loading machines which eliminate hand stacking of the loaded shipping cases as they come off the filling line. These units, requiring one operator and one maintenance man, replace four pilers at the Roman Cleanser plant. They have speeded up operations to a considerable degree and are effecting important savings through more efficient loading of the pallets and virtual elimination of broken cases and smashed bottles.

Since thousands of cases of the company's products (Roman Cleanser, Romite and Romay) come off the filling lines daily, the need for a systematic method of stacking the cases for storage or shipment is obvious. Shipping cases, measuring approximately $11\frac{5}{8}$ in. high by $8\frac{3}{4}$ in. wide by $14\frac{1}{8}$ in. long, weigh approximately 43 lbs. when filled.

In the Roman Cleanser installation, five filling lines are routed to the automatic case-loading machines, with conveyor lines so arranged that any size of bottle or type of product can be handled on either unit. This interchangeable arrangement, made possible by alternate conveyor lines, provides considerable operating flexibility and permits the loaders to be synchronized efficiently with filling operations at all times. The machines are capable of handling up to 1,000 cases of Roman Cleanser products per hour.

The five filling lines which feed into the pallet loaders include two varieties of product in quart bottles, two kinds of half gallons and one type of product in gallon containers. Since the installation of the loading machines, all hand stacking of shipping containers has been eliminated, although a short "stand by" line is

maintained for possible use in the event of operating delays.

The automatic pallet-loading machines are designed to handle any smooth, flush carton or box not less than $8\frac{1}{2}$ in. in length or width and not more than 24 in. long or 18 in. wide. Larger sizes may be accommodated if the stacking pattern does not require that they be turned.

The maximum pallet load handled on this type of equipment is 40 in. wide, 48 in. long and 70 in. high, measured from the bottom of the pallet. Maximum weight is 2,150 lbs. per load or slightly over 700 lbs. per layer of cartons. Machine capacity runs from 20 to 25 cartons per minute, depending on the size and stacking pattern.

Controls installed on the equipment include a stack pattern cartridge which regulates each pallet load according to an A and B sequence, with alternate layers cross-tied to form a stable, interlocking load. In the Roman Cleanser installation, the two machines are wired to provide three types of stack patterns. Another installation is reported to handle as many as 18 patterns.

Filled shipping cartons are fed into the two case-loading machines by means of accelerator rolls which automatically space the cartons, with limit switches stopping and releasing the containers in accordance with the sequence demanded by the stack pattern. Boxes are counted by a photo-tube.

As they proceed to the pallet loader, the cases pass over a turntable which automatically rotates some of them a quarter-turn in accordance with the stacking pattern.

The pallets are fed directly from the pallet hopper at the back of the machine one at a time and are elevated to the proper height beneath a stripper plate on which the actual stacking takes place.

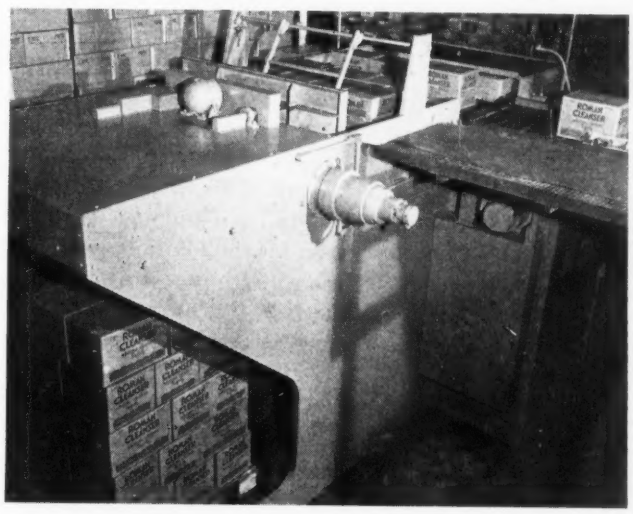
When a complete row of containers has entered the machine, a powered ram slides them onto the stripper plate and succeeding rows, similarly handled, complete the layer. At this point, the stripper plate withdraws, depositing the first tier of packages on the pallet, and the pallet is lowered sufficiently to receive the next layer of cartons. Due to the precise timing and operation of the machine, the containers are lined up perfectly in a tight, secure load.

As the final layer is dropped gently into position, the pallet lowers to the bottom of the machine and is ejected onto a roller conveyor, at which point it is picked up by fork truck and stacked for storage or placed immediately in a waiting delivery truck at the loading dock. When one pallet load is discharged, a new pallet is automatically released from the pallet hopper and elevated to loading position.

At the Roman Cleanser plant, the wooden pallets used are of the "take it or leave it" type, which give the lift-truck operator the option of leaving them beneath the load or removing them for further use, as required.

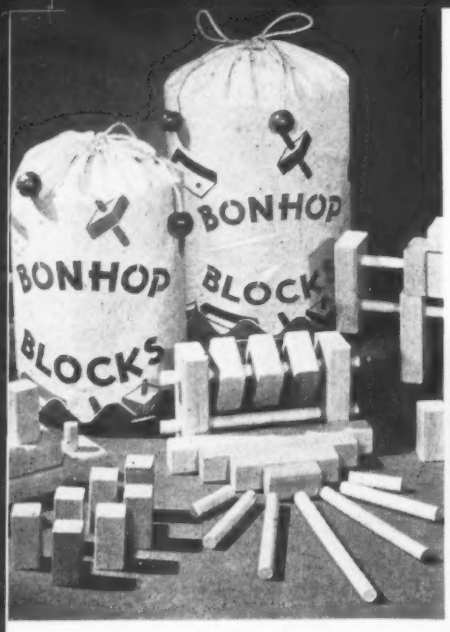
CREDITS: *Automatic pallet loader built by Production Aids, Inc., Los Angeles, and sold by Lamson Corp., Syracuse, N. Y.*

STACKING OF CASES by pallet loader at Roman Cleanser plant. As each layer of load is completed, stripper plate withdraws, allowing it to drop $\frac{3}{4}$ in. onto pallet. Note completed pallet load emerging from unload section at left.

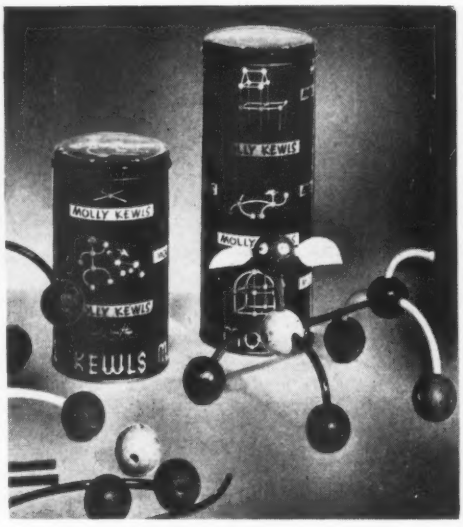


COMPLETED PALLET LOAD being removed by lift truck operator. Containers are perfectly aligned and interlocking stacking pattern forms a secure load. Another partially completed pallet may be seen in the machine.

TOY



COTTON DRILL duffel bag is new conception in packaging of blocks that has won high favor with parents because it encourages the child to put toys away.



LITHOGRAPHED can in various sizes provides a quality re-use container for successful educational toy manufactured by Paul BonHop, called "Molly Kewls."

POLYETHYLENE FILM of good clarity, stitched and piped with blue vinyl edging is durable, eye-catching package for play beads. Paper insert gives identity.

"How is it packaged?" is one of the questions most often asked today at the Toy Guidance Exhibit, New York, information center for the toy industry.

It is also one of the first questions asked by toy buyers of every toy manufacturer. "First they have to like the toy; then they want to know how it's packaged," manufacturers say. "If the package is not right, it's no go."

The $400,000,000 toy industry is more package conscious than it has ever been before. This is due to a number of factors:

1. Toy production, almost non-existent due to material and labor shortages during the war, has had four years to get back into full-scale production and now finds itself in a healthy competitive market where a good package is an essential selling aid. (There were about 1,000 exhibitors at this year's Toy Fair in New York City in March.)

2. Chain and variety stores, whose sales depend almost entirely on self-service package display, are discovering that toys can be profitable, year-around merchandise, ranking in importance with ready-to-wear accessories, notions and small wares. The great volume of toys now being sold by chains and variety stores has had a decided effect in levelling off toy buying from almost 78% in the six-week period before Christmas to nearer 65%, making manufacturing and wholesaling of toys less hazardous, according to Melvin Freud, president of the Toy Guidance Council. It is also reported that this intensive effort for year-around business has resulted in a 400% increase in toy sales by the varieties and chains in the past eight years.

3. Success of branded toy lines has demonstrated the advantage of the package in providing quick brand identification.

4. Modern merchandising of toys demands the same kind of counter display appeal as products in other lines.

5. Increased retail operating costs make buyers eager for toy packages that save labor in handling and require no additional packaging in the store.

6. Consumers are attracted to toy packages with re-use features that encourage the child to pick up his playthings and put them away—or packages that have toy appeal in themselves, because they are miniature houses, grocery stores, garages, etc., used as part of the play activity.

All these factors must be taken into consideration by the manufacturer of toys as well as the hundreds of suppliers of packaging materials assisting in the planning of toy packages.

The toy business, like many others, is fast progressing toward a 100% packaged status. Only a comparatively small percentage of toy goods is now sold unpackaged, except for certain popular-priced volume items on the variety-store counters.

That it pays can be illustrated by countless case histories. For example, after Strombeck-Becker rede-

PACKAGES

BRAND CONSCIOUSNESS, COUNTER SELLING, KEENER COMPETITION, YEAR-ROUND PROMOTIONS MAKE PACKAGING A POTENT FACTOR IN MERCHANDISING OF PLAYTHINGS

INCREASED SALES of six to seven times that of the old package are reported by Strombeck-Becker Mfg. Co. since this Bill Ding package permitting open display of clowns was introduced.

signed the package for its Bill-Ding clowns three years ago, sales of this item doubled the first year and are now six or seven times greater than in the old package. The new package, the company says, is a silent salesman, whether open or closed. It is of two-piece folding construction printed in four colors with a photographic illustration showing children playing with the toy, a line drawing of the toy and a series of action drawings on the cover depicting children using the toy. Special construction of the base, permitting complete visibility of the toy and providing a "picture-frame" surface for printing brand identity and a series of illustrations demonstrating ways to build the toy, are the most important sales features of the package, it is believed. The old package did not have these features and therefore lacked sufficient display advantages.

Visibility and display

Visibility and better display features are probably the most noticeable innovations throughout today's toy packaging. Small-sized dolls are being put in set-up boxes with cellophane stretched tightly over the box bases so that when covers are removed and placed underneath the boxes, the dolls are on display, yet protected from handling by the cellophane covering. Set-up boxes for larger dolls are appearing more often with circular windows in the lids so that the coloring of the doll's hair and eyes may be seen through the box cover, thus permitting the sales person to pick out blond or brunette without opening the boxes. Boxes for dolls also are being made of sturdier board and are more often seen with colorful box wraps in plaids or stripes.

Transparent packaging is becoming as much a force in toy selling as in all other types of merchandising, all

COVER ILLUSTRATION that describes the toy is demanded for counter selling. Good example is this Unger woodburning set package. Inside flaps afford excellent display when package is open.

NOVELTY INTEREST is well illustrated by this cellophane window carton for the Sun Rubber Co.'s Amosandra, the radio daughter of Amos and Andy.

the way from cylindrical rigid transparent window boxes to hold wooden beads and small construction toys to hundreds of transparent window boxes and cartons that reveal contents.

The folding carton counter dispenser has also found an important place in toy packaging, particularly for small items. An interesting example is the counter unit for Ed-U-Cards, a series of card games, individually packaged and placed in an attractive die-cut display carton.

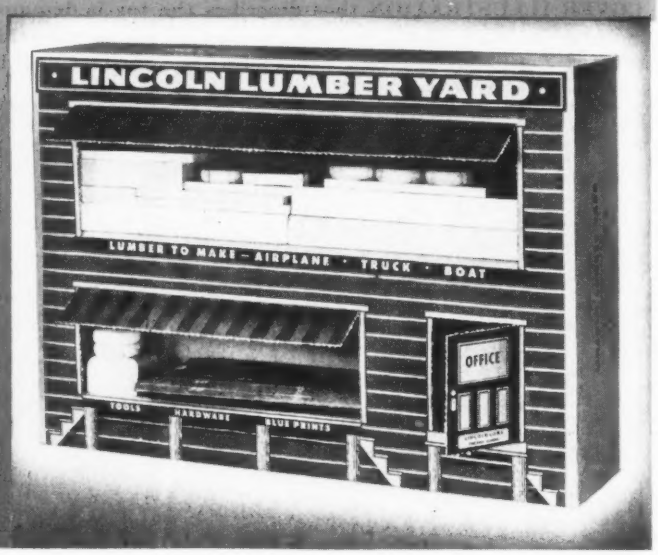
The demand for better package display is also calling for improved label illustration and design. Progressive toy manufacturers are giving attention to more tasteful and less garish art work. Because of self-service selling, there is a greater attempt to tell quickly what the toy is and how it is used through illustration and quick-paced copy. Excellent examples are the boxes for the scale model plastic caterpillar construction toys sold by Reuhl Products, Inc., Madison, Wis. These toys, made from molds originally used for models employed by salesmen of a large farm equipment manufacturer to show dealers how to operate the equipment, are exceptionally well made. They required a package to express this quality. Each box, therefore, has a specially printed wrap carrying photographic illustrations of the model, with suitable illustration of a boy who has put the model together. Each is done in a distinctive color with black so that together the boxes make a lively color display. Inside platforms have been well engineered so that each component part is completely visible and held securely. The effect is one of "professional" appeal for an educational toy.

Paul BonHop, Inc., has developed box labels of very interesting design that tell the story of modern toys with modern art treatment. Its plastic gears, called Roto-Gear, that teach small fry the rudiments of mechanical engineering, have a most appealing stylized label showing the gears in action. This company's tool kit carries on the cover a well planned illustration of the toy contained.

Re-use packages

More outstanding, however, are the new conceptions in re-use packaging developed for Paul BonHop toys—packages which the company considers as important as the toys themselves. BonHop blocks are sold in a colorfully printed cotton drill round-bottom duffel bag with

PLAY CARTONS designed as appropriate housing for the toy are not new, but have tremendous appeal with both grown-ups and kids. Ideal Novelty & Toy Co. has a series of cartons that become miniature houses for the furniture when they are opened. The perforations and printing on the Lincoln Lumber Yard carton provide a complete storage warehouse and office. Simon & Shuster's Tiny Golden books are presented in cartons that become a miniature house or grocery store when the books are removed.



QUALITY APPEAL is given to these scale-model plastic caterpillar construction sets put out by Reuhl Products, Inc., by using tastefully designed set-up boxes fitted with carefully planned die-cut platforms to hold parts securely.

$^{3}/_{16}$ in. cotton rope drawstring—as permanent as the toys themselves.

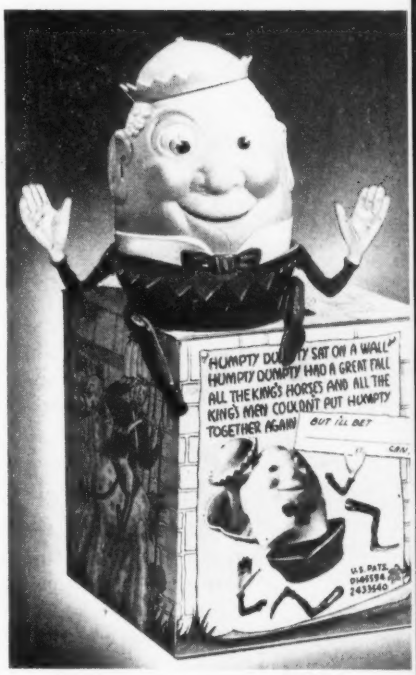
This firm, only three years old, has also adopted interesting metal containers for "Molly Kewls," a construction toy made of rods and spheres similar to those chemists use for demonstrating atoms in a chemical formula. In fact, the idea came from this usage, when Emil Bondy and R. L. Hopkins (the "Bon" and "Hop" in the company name) as Army officers had employed such demonstration material for training courses during the war. In partnership with F. B. Paulson, they entered the toy business with these ideas in 1946. The cylindrical screw-top metal cans, lithographed in four colors with black background, immediately met with wide consumer acceptance. The metal cans provide a permanent type of container which this firm believes is necessary for any toy comprised of many small parts.

Latest addition to the BonHop line is a polyethylene bag for wooden beads. The stitched polyethylene bag is trimmed with blue vinyl piping and has a heading at the top to give it a finished appearance when the drawstring is pulled shut. Polyethylene was chosen as the material because of its durability. The company was also able to obtain a polyethylene film of excellent clarity, which enhances the visual appeal of the beads showing through. Since the package is a permanent storage container for the toy, no brand identification is printed on the bag, but is conveniently provided by a printed package insert which shows through the bag.

Carton houses

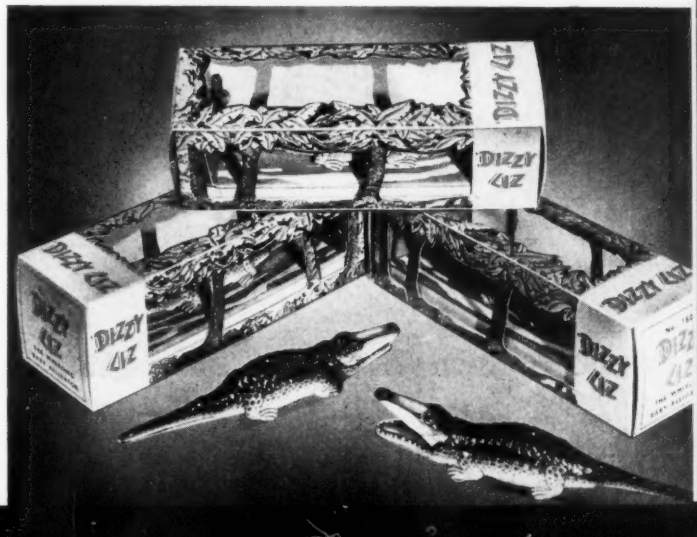
Designing folding cartons or boxes to represent miniature houses, stores, garages, etc., is not a new idea, but it is one that has wide appeal in toy packaging wherever the toy lends itself to such treatment.

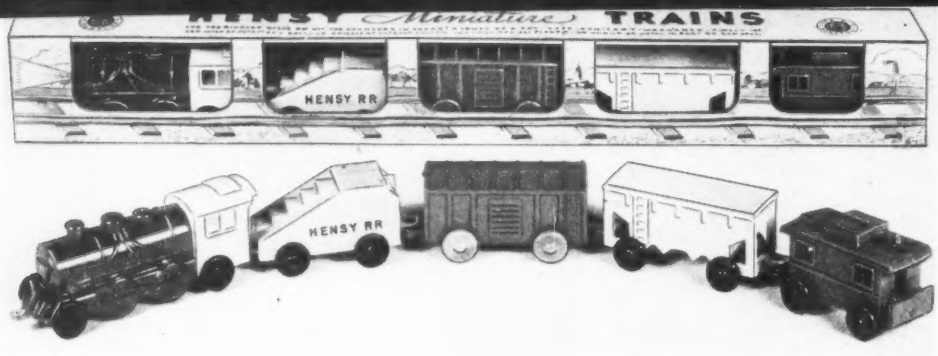
Ideal Novelty & Toy Co. has designed a whole series of cartons for plastic doll furniture, each one appearing to be a little house with the interior of the box representing a third-dimensional room appropriate for the furniture contained. The company which makes Lincoln Logs has just recently introduced its Lincoln


HUMPTY DUMPTY SAT ON A WALL
HUMPTY DUMPTY HAD A GREAT FALL
ALL THE KING'S HORSES AND ALL THE
KING'S MEN COULDN'T PUT HUMPTY
TOGETHER AGAIN
BUT I'LL BET
U.S. PATS.

HUMPTY'S famous wall is provided by the package for this Humpty Dumpty toy which falls apart after a fall, but is easily reassembled. Playmaker Toys, Chicago, solved the problem by using a set-up box base and a folding lid. A die-cut corrugated insert supports the assembled toy firmly in the box, while four flaps on the lid give sufficient strength to bear the weight of a child without damage. The printed wall design serves as background to show how the toy works.

JUNGLE ILLUSION is created for Dizzy Liz, a mechanical toy, with printed die-cut carton. Toy is secured to platform and key for operating it is looped in carton so it can't get lost.





VISIBILITY is all important in today's toy selling. An interesting treatment of a long window carton is this for Hensy Miniature Trains, permitting locomotive and cars to be seen.

DISPLAY CARTONS are widely used for counter selling of small items. This one for Ed-U-Cards is reported to receive prominent counter position and is a sales producer for the merchant.

Lumber Yard, a wood construction toy, in a heavy printed kraft carton perforated so that the child can use the box as a miniature lumber warehouse and office, complete with awnings and a door that opens.

Simon & Shuster puts its Tiny Golden Library of Nonsense Stories—a series of miniature books—in folding cartons of special construction to represent a little house or a little grocery store when the books are removed.

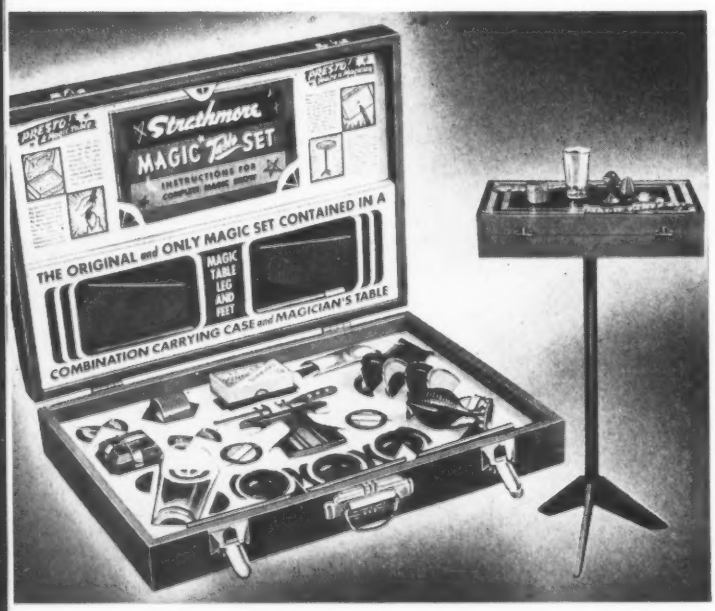
Kits and cases

The re-use kit or case is a popular package form in the toy industry. Examples are the miniature trunks containing dolls and their wardrobes, chemistry sets, doctors' and nurses' cases, etc. A current favorite is the Strathmore Magic Set packaged in a hinged carrying case, equipped inside with a collapsible stand which can be set up for the "magician" to give his show.

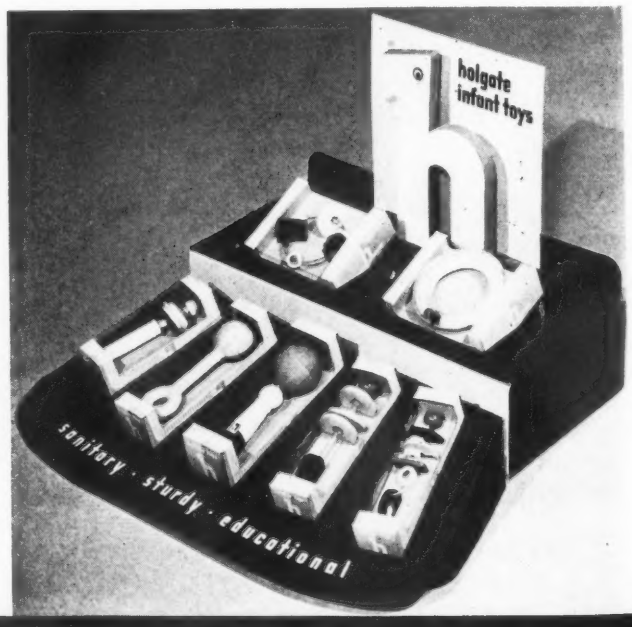
Novelty appeal

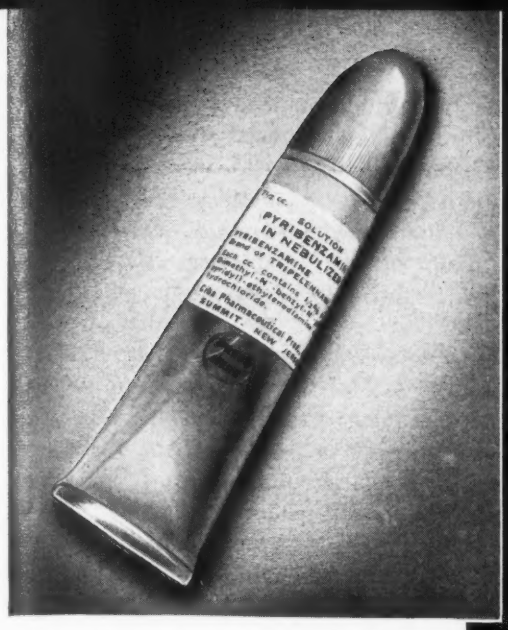
Novelty is the essence of a large part of the toy business. The average life of a toy, except for the staples which go on from year to year, is said to be only three years. The package can play an important role in aiding a manufacturer to (*Continued on page 178*)

PERMANENT CASES, such as a suitcase or trunk, are useful package adjuncts that become important selling aids. This Strathmore Magic Table set holds in its hinged case a collapsible stand, shown at right, for putting on the "show."

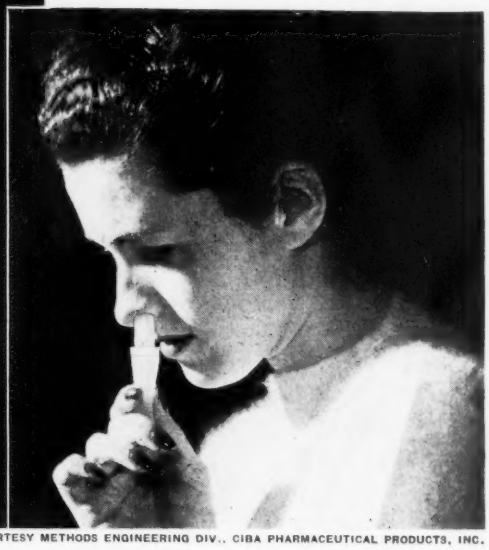

Strathmore
MAGIC SET
THE ORIGINAL and ONLY MAGIC SET CONTAINED IN A
MAGIC TABLE LEG AND FEET
COMBINATION CARRYING CASE and MAGICIAN'S TABLE

COUNTER UNIT, easy to set up, assures constant display of Holgate packages of infant toys, part of an extensive well designed family, identified with amusingly styled trademark letter "H" for Holgate. These packages won first place in toy group of National Folding Box competition.





1. TUBE COMPLETE with streamlined closure and pressure-sensitive labels. All parts are polyethylene except for the stainless-steel spray tip. Base of the tube is heat sealed.



2 and 3. NEBULIZED SPRAY is achieved by slight pressure at point marked by "press here" label. This is actual photo. Soft polyethylene nozzle, integrally injection molded with tube, fits comfortably in nostril.

PHOTOS COURTESY METHODS ENGINEERING DIV., CIBA PHARMACEUTICAL PRODUCTS, INC.

Squeeze-tube for nasal spray

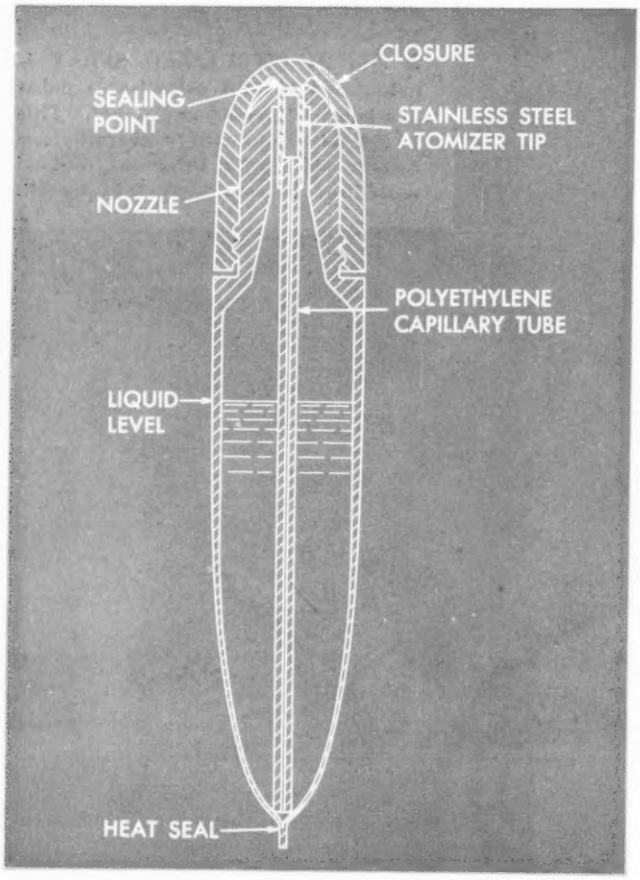
FUNCTIONAL PACKAGE DEVELOPMENT IS EXEMPLIFIED BY CIBA'S POLYETHYLENE 'NEBULIZER' THAT PROVIDES CONVENIENT AND EFFECTIVE APPLICATION OF ANTI-HISTAMINE DRUG

Research and development by Ciba Pharmaceutical Products, Inc., Summit, N. J., has led to the introduction of a new form of polyethylene package which has important implications for the whole field of drugs and medications administered by nasal spray.

Adopted by Ciba for its Pyribenzamine, an antihistamine solution used in the treatment of hay fever and other nasal allergies, the package is in the shape of a small ($3^3/_4$ in. long) collapsible tube with an integral spray nozzle. It is not extruded and formed like metal tubes, nor blow molded like the familiar "squeezable" polyethylene bottles, but injection molded in one piece. The body of the tube has a uniform wall thickness of 0.020 in. and is sealed off across the bottom by a unique type of dielectric heat seal. A stainless steel spray tip fits the upper end of a flexible polyethylene tube which extends to the bottom of container and this spray assembly is tightly fitted by friction in the 0.125-in. aperture of the molded tube and nozzle. A full-skirted, dome-shaped molded polyethylene closure threads down over the nozzle when the tube is not in use and provides a leakproof seal by means of a small conical projection inside the dome which seats itself against the spray-tip tube opening (see diagram, Fig. 4). The light green closure (see Fig. 1) fits flush with the outside diameter of the tube to provide a completely streamlined pocket package.

In use (see Figs. 2 and 3), the cap is removed, the nozzle is inserted into a nostril and a quick, slight pressure between thumb and forefinger on the midsection of the tube sends an atomized spray up through the nasal passages. The polyethylene walls of the tube are heavy enough so that they recover instantly when pressure is released, drawing in air for the next discharge. Tests show that an internal pressure of 10 lbs. per sq. in. is created on each "squeeze" and the $^1/_4$-oz. tube is enough for about 400 applications.

Thus, new efficiency, economy and convenience is



4. VERTICAL CROSS-SECTION of container and closure, viewed from the side, showing simple assembly of spray tube and sealing cap. This drawing is approximately the actual size of tube.

provided for this type of treatment, which is increasingly used not only for hay fever, but for all types of nasal disturbances that may be of allergic origin, including chronic colds. Effectiveness of the treatment depends upon use of the spray frequently throughout the day. It is necessary, therefore, for the user to carry about with him the drug and the means of application. Previously the only convenient pocket package was the ordinary bottle with a rubber-bulbed dropper and drops are less effective than the atomized spray. Carrying a conventional bulb atomizer was inconvenient for most people and it tended to waste the product. What Ciba sought—and achieved—therefore, was a small, unbreakable, foolproof, pocket package that would combine the best features of the two previous methods of treatment.

Among its other notable features, the package demonstrates a solution to two of the troublesome problems in polyethylene packaging: heat sealing and labeling.

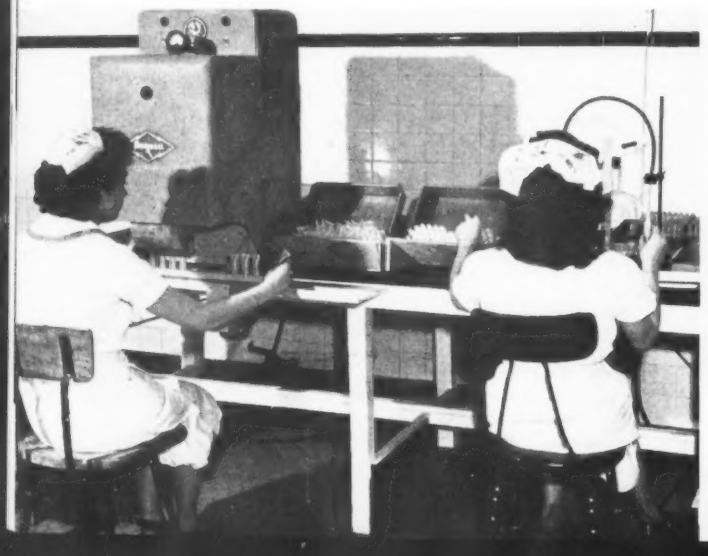
Credit for the development goes to Ciba's Charles E. Munson of the Package Planning Div., L. H. Zahn and J. R. Miller of the Methods Engineering Div. The package goes into regular distribution next month, after development work of over a year.

In investigating the possibility of a flexible-walled container, Mr. Munson originally considered a number of plastic formulations, including polyvinyl chloride, cellulose acetate, cellulose nitrate, nylon and methyl methacrylate. Each had certain drawbacks in this particular application. The vinyl reacted unfavorably to the product. Acetate, although its flexure and return were satisfactory at first, developed cracks after 50 to 60 flexures and in addition its water-vapor transmission rate caused excessive loss from the small volume of fluid. Similar objections applied to the cellulose nitrate. Nylon in suitable wall thicknesses possessed excellent flex-and-return qualities, but its cost was deemed too high and its WVT rate was on the high side. Several formulations of methyl methacrylate tested were found to crack rather easily when submitted to flexure.

Polyethylene already had been selected as the most likely material when the March, 1948, issue of MODERN PACKAGING called the researchers' attention to several recent developments in this field, including the use of squeezable spray bottles for such difficult products as hydrofluoric rust removers and under-arm deodorants and new methods of sealing polyethylene.* Available

* See "Polyethylene Closures," p. 102, and "Flame-Sealed Visibility," p. 112, March, 1948; "Squeezable Bottles," p. 108, Nov., 1947, and "Squeeze Bottle for Acid," p. 106, Aug., 1948.

5. HEAT SEALING the tube base (left) on specially adapted electronic sealer and filling (right) through nozzle opening with a conventional-type ampule filler.



6. CAPILLARY TUBE with its metal tip is inserted in the base (right) after container has been filled. The threaded closure is applied by hand (left) to the completed package.

then were two types of blow-molded polyethylene bottles: one the conventional Boston round bottle in 1-oz. size, the other a 2-oz. size having semi-flattened, parabolic sides and an elliptical base.

Success of these packages convinced the Ciba men that they were working along the right track. Polyethylene was known to be inert and non-toxic and to have an extremely low water-vapor transmission rate and a formulation designated as DYNH—which was adopted—had already experienced rather extensive use in the medical-surgical field. But it was apparent that the blown bottles could not be simply adapted to their product. If the size of the bottle were reduced to where it would hold $^1/_4$ oz. of fluid, the degree of rigidity required in the neck and sides to supply a friction seal for any type of nasal spray mechanism would materially reduce the effective area for the necessary pressure which must be created rapidly within the container to provide a penetrating nasal spray.

A tube-shaped container was decided upon. At first, attempts were made to use extruded tubing for the body of the tube, but difficulties in sealing this to the shoulder led to abandonment of the idea.

Many shapes and sizes of squeezable containers were made by hand and tested before something close to the present design of an integral tube and nozzle, to be molded rather than fabricated, was achieved. The design was turned over to a leading molder just a year ago, with the request that an experimental single-cavity mold be started. At that point it was expected that at least another 18 months of development work would be required, because in addition to building a practical multiple-cavity injection mold that would turn out polyethylene bodies of uniform and suitably thin wall thickness—something that had never been done before—there had to be developed a practical production method of sealing two 0.020-in. thicknesses of polyethylene at the base of the tube.

While the molders went to work on their part of the problem, Mr. Zahn was flying around the country studying sealing methods. Makers of polyethylene bags had various methods of flame- or heat-sealing thin sheets of polyethylene extruded materials in thicknesses of 0.002 to 0.005 in. No one at that time, apparently, had sealed polyethylene above 0.010-in. thickness. Experts shook their heads over Ciba's problem of a 0.040-in. thickness, because polyethylene has such a critical "flash" melting point that the outside of a section of such thickness usually melts before an interior seal is effected.

Adhesives, bar-type heat sealers and conventional electronic sealers were tried and rejected. Eventually, a new type of electronic sealer was adopted and modified at the Ciba plant to do the job. Special heat and cooling cycles, as well as special pressures, were worked out. According to Mr. Zahn, the machine as modified does not seal the polyethylene electronically, but by direct heat.

"The reason for adopting this particular machine," says Mr. Zahn, "was the (*Continued on page 175*)

7. PRESSURE TEST. **Complete unit is squeezed in foot-controlled fixture at 30 p.s.i. Average tube will stand up to 70 p.s.i. of pressure.**

TO SPRAY
To obtain a fine spray throughout the nasal passages, remove cap, hold tube upright, tilt head slightly forward and insert tip into the nostril (Fig. A). With thumb on spot labeled "Press Here" squeeze firmly and quickly (Fig. B).
FIG. A
SNIFFING AIDS DISTRIBUTION
A quick sniff when tube is squeezed will help carry the medication high up in the nasal passages (Fig. C). The tube must be held upright to obtain best results.
FIG. B
FIG. C
CAUTION: Do not attempt to apply the spray except when the tube is held in the upright position. Remove spray tip from nostril before releasing pressure on tube.
SAFE IN POCKET OR PURSE
When replacing the cap be sure it is screwed on firmly. Plug inside cap seals opening in tube. Screw threads give double seal against leakage (Fig. D).
NOTE: It will be observed that the nebulizer is only partially filled. This is intentional since ample air space is essential to obtain a proper spray.
FIG. D
Ciba

8. TUBE IS PACKED **in folding carton with instruction leaflet. Manufacturer's name does not appear on leaflet. If he prefers, prescription druggist can strip pressure-sensitive label from tube to remove the manufacturer's identity.**

FIFTH OF A SERIES

On this month's cover . . .

COLGATE DENTAL CREAM

NOMINATED FOR PACKAGING'S HALL OF FAME BECAUSE:

- **It was the first product to capitalize on the collapsible tube—a new form of packaging in 1896**
- **The current package pioneered modern design in 1933**
- **Packaging initiative has helped hold its place as the biggest-selling dentifrice**
- **Its aggressive merchandising helped build America's collapsible-tube industry**

More than any other single influence, Colgate's tooth paste made tooth brushing a daily ritual in 40 million American homes. In the process it staked out a claim to a lion's share of the dentifrice market, which now amounts to $80 million annually. Today Colgate Ribbon Dental Cream is far and away the No. 1 seller, accounting for—according to trade sources—nearly 40% of all dentifrice sales.

All this has come about because the Colgates of 1896 were smart enough to recognize and exploit a new and better package form—and because succeeding generations of Colgate management followed through with a continuous policy of both quality and quantity in product, packaging, advertising and promotion. The record amply justifies this product's nomination to packaging's Hall of Fame.

A dentrifrice was a luxury, used only by the fastidious few, back in 1896. The collapsible tube was a novelty. Colgate & Co. put the two together and really launched not only the dentifrice business—for tooth paste from a tube made tooth brushing for the first time convenient, pleasant and sanitary—but also the collapsible-tube industry, which last year turned out 720 million tubes as packages for thousands of different products.

Today Colgate is a part of the world-wide soap-and-toiletry empire of Colgate-Palmolive-Peet, and Colgate Ribbon Dental Cream accounts for a fat portion of that corporation's $302-million annual sales. Every time the 50-ft. clock ticks atop the corporation's huge main plant in Jersey City, straight across the Hudson from downtown Manhattan, seven more tubes of tooth paste roll out of that plant—not to mention the three other Colgate tooth paste plants in this country and 16 abroad.

Advertising and promotion

Not only has Colgate always been a leader in packaging, but along the way it has developed techniques in advertising and promotion that have become classics of mass merchandising.

No one with eyes or ears needs to be reminded that Colgate Ribbon Dental Cream is and always has been a heavy advertiser. Yet its shots are exceptionally well placed, for Colgate's advertising budget is nowhere nearly proportional to its slice of the dentifrice business. Best estimate is that the industry as a whole recently has been spending $16 million a year for advertising. Colgate's budget officially is not disclosed, but American Newspaper Publishers Assn. figures show a total, in all media, of $11,928,000 in the nine years 1939 through 1947, averaging about $1,325,000 a year. If the unofficial "guesstimate" is correct, Colgate has been selling at least one-third of all dentifrices and its annual sales therefore—based on an industry total of $80 million—would run around $27 million.

Slogans have been markedly successful in Colgate advertising and promotion. Some of the best have been tied to package improvements. Following the adoption of the famous ribbon tube opening in 1908, advertising long displayed the double-edged boast:

"We couldn't improve the product, so we improved the tube!" About the same time, the name became Colgate's *Ribbon* Dental Cream and every ad and every tube carton for many years carried the slogan: "Comes out like a ribbon; lies flat on the brush—Colgate's Ribbon Dental Cream." The latter jingle actually was put to music and sung by college glee clubs—being the granddaddy, perhaps, of today's singing commercial, of which Colgate is a leading proponent ("Cleans your breath ... while it cleans your teeth!").

It is significant to note, however, that much as it favored descriptive catch phrases, Colgate's copy always stayed away from the "fear" approach and wild curative claims that were popular with many dentifrices in the pre-FDA days. Colgate's, in fact, advertised warnings that a tooth paste cannot cure pyorrhea, correct acid mouth, fill cavities or firm the gums. It was content to say that Colgate's was a safe cleansing agent, refreshing, pleasant tasting, economical to use. While its more extravagant rivals fell by the wayside, Colgate's steadily built a bigger and bigger tooth-paste business.

Good taste was literal with Colgate's; its pleasant, minty flavor made it a favorite with children and led to one of the most successful promotion programs of all time. In the days when tooth brushing was as unfamiliar to school children as trigonometry, Colgate's distributed millions upon millions of free trial tubes through the schools and in many instances supplied free tooth brushes and sent hygienists around to give demonstrations in the proper brushing technique. In 1911 and 1912 alone, Colgate's gave away 2,000,000 tubes through the schools. Advertising and package copy stressed to parents that "children use it without urging."

Recent surveys show that the average dentifrice user changes brands every 18 months, but, judging from its steady high level of sales, Colgate users must be a particularly faithful lot. Habits formed in childhood are long lasting.

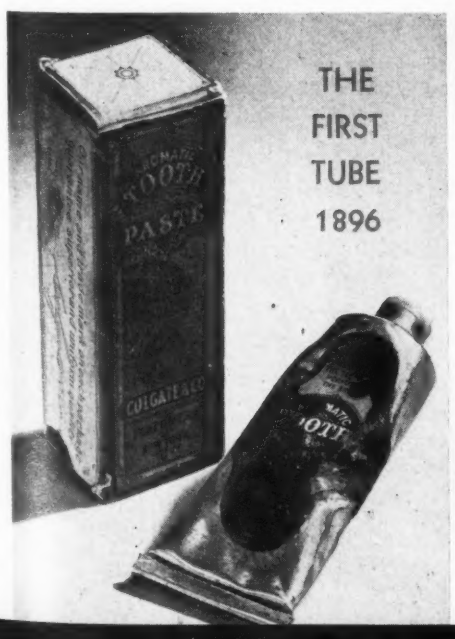
PRESENT PACKAGE, shown here in four sizes currently being marketed, is a fine example of modern display labeling. This red and white design was adopted in 1933. Aluminum tubes have been used for the two larger sizes since 1940. Note the use of carton tabs to advertise two related products—Halo shampoo and Veto deodorant. TUBES COURTESY WHITE METAL MFG. CO.

Historical background

Actually, Colgate's was not the first to think of putting tooth paste in a collapsible tube. But it was the first to make a smashing success of it and, of the two or three pioneers in the '90s, it is the only survivor in the dentifrice business today.

Dentifrices in liquid, powder, cake and paste form

A FAR CRY is this battered 1896 carton and tube found in Colgate files—first of its line. Made of tin, tube had clipped base and paste-on label.



RIBBON OPENING, introduced in 1908, gave Colgate its great early advertising slogans: "Comes out a ribbon; lies flat on the brush" and "We couldn't improve the product, so we improved the tube." Illustration remained on carton for many years and the name became "Ribbon Dental Cream."

RIBBON OPENING
1908
ITS DUAL ACTION CLEANS COMPLETELY— REMOVING CAUSES OF TOOTH DECAY
COMES OUT A RIBBON LIES FLAT ON THE BRUSH
COLGATE-PALMOLIVE-PEET CO.
MADE IN U.S.A.

were sold in this country before the Civil War—many of them imported. The pastes, which apparently came along after the war, rapidly gained in popularity because of their more pleasant taste. But they had to be put up in small imported porcelain pots or jars and the only practical way to get at the paste was to wet the tooth brush and rub it across the surface of the paste. As a family proposition this was hardly sanitary and having a separate jar for each member of the family was expensive. Due to the high cost of the jar, the package sold for about half a dollar—which in 1890 was half a day's wages for a working man. Dr. I. W. Lyon, who at the time was having considerable success with his tooth powder packaged less expensively in a tin can with a "telescopic measuring tube," is credited with having remarked, of his competitor's wares: "One-third paste; two-thirds pot."

Among those selling potted paste was Dr. Washington Wentworth Sheffield, a New London, Conn., dentist. In the late '80s his son, Dr. L. Tracy Sheffield, came home from Europe with some samples of foods packed in collapsible tin tubes. The tube had been invented in 1811 by an American, John Rand, but its manufacture and use had developed most extensively in Europe; in the U. S. a few tubes were being made by A. H. Wirz, Inc., Philadelphia, for artist's colors and glues.

The Sheffields started packing their tooth paste in imported tubes in 1892. Sales went up so fast they bought a machine and started making their own tubes; soon they had established a tube plant and were supplying tubes to other dentifrice manufacturers. Eventually the tube business overshadowed the tooth-paste business so far that the latter was dropped, but the collapsible tube company thus born was the New England Collapsible Tube Co., one of today's major suppliers, which still has its headquarters in New London and is managed by the fourth generation of Sheffields.

Colgate's entry

Dentifrices in paste, powder and cake form had been manufactured since 1873 by Colgate & Co. as a sideline to its soap, starch and perfumery business founded in 1806 in lower Manhattan by William Colgate. The Colgate management quickly perceived the convenience and economy of paste in tubes and made the switch in 1896. The "Aromatic Tooth Paste (for Cleaning and Preserving the Teeth and Refreshing the Breath)" in tubes was an immediate success, marketed through the channels which the Colgates already had firmly established for their soap and perfumery products here and abroad.

The first tube used by Colgate's (see illustration) was of pure tin and had only a small pasted-on paper label, although the words "Colgate & Co., New York," were molded around the shoulder much as they have been for 53 years. The accompanying carton was one-color printed in a bronze ink. It bore the maker's signature and guarantee, and a testimonial letter from Prof. Henry Leffman of the Pennsylvania College of Dental Surgery, dated 1891, stating that he had analyzed the tooth paste and recommended it as "a pleasant and agreeable stimulation" to the teeth and gums, imparting "an agreeable fragrance to the breath."

The first Colgate tubes were imported from A. G.

CURLICUE DESIGN, maroon against a pinkish-tan background, was used for many years after first decorated tubes were introduced in 1900. "Giant" size was first offered in 1925. In 1928 Colgate & Co. merged with Palmolive-Peet and plastic caps were used for the first time.

TREND TO MODERN design is shown by this short-lived 1932 version, which also first displayed the American Dental Assn. seal of approval on the tube and carton. The tube coloring remained pink and maroon, but all of this gave way a year later to the present brilliant design.

für Metallindustrie G. Richter, Pforzheim, Germany. Gustav Richter—father of Hubert Richter, who started the White Metal Mfg. Co. in Hoboken in 1913 and still vice president of that company—is credited with being the first to put tube manufacturing on a mechanized basis in Europe and from his plant men went out to establish tube companies in a half-dozen other countries, including the United States.

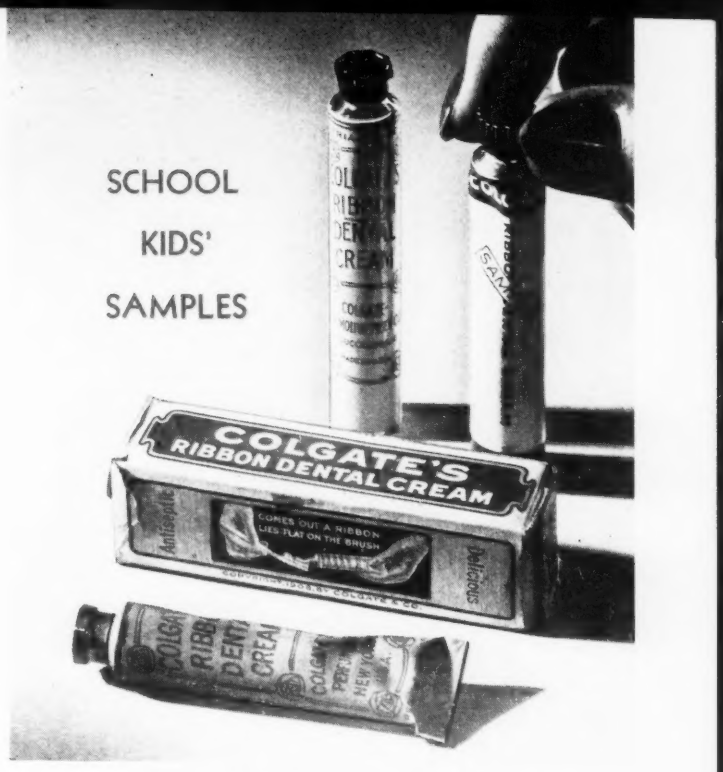
Although by 1900 there were four tube manufacturers operating in the United States (Wirz, Consolidated Fruit Jar Co., J. S. Turner White Metal Co. and New England Collapsible Tube), Colgate's stuck to its European sources until shortly before the first World War. One reason was that Richter, in Germany, was the first to develop means of decorating tube surfaces directly and Colgate's recognized that this was highly desirable for tooth paste particularly. Richter started one-color printing by semi-automatic means in 1896 and about 1900 he produced the first decorated tubes made by a machine process, using rubber rollers and stamps. From 1900 on, all Colgate tubes were decorated and the paper label was dispensed with.

In 1908 Colgate's originated the ribbon opening, started its heavy national advertising based on this package improvement, began its school-sampling program and forged ahead to a position of dominance in the dentifrice field which it has never lost. At this time the imported tubes were still filled semi-automatically in Colgate's Jersey City plant, using air pressure.

In 1910 the opening of the Hudson & Manhattan Tubes marked the start of transit advertising, of which Colgate's was an early practitioner. The car cards with the slogan, "Take home a tube," were as familiar as cigarette ads today. About 1910, also, the company bought a chocolate-drop candy machine which they converted to filling of the tooth-paste tubes. Tubes were inverted in holes of the tray "molds" and a whole row filled at one time. This marked a considerable speed-up in packaging, although the closing and clipping of the tube end still remained virtually a hand operation.

In 1911, however, Colgate's installed a machine developed by the Arthur Colton Co. which automatically folded over the tube end and two Colgate engineers—C. C. Schwarz and K. T. Kranz—designed an automatic clip-feeding machine. In 1912 they installed a cartoning machine made by E. D. Anderson and this for the first time gave them a fairly complete automatic filling and packaging line—not up to today's standards, of course, but far ahead of its time.

By this time package design had settled down to the rather ornate, rosebud borders, printed in maroon against a solid pinkish-tan background, much as it is shown in the accompanying illustration of a 1925 tube. The carton was a good display carton even by today's standards, although the lettering had a slightly Oriental slant. Two and later three sides of the carton were display panels for the simple bold lettering, "Colgate's Ribbon Dental (*Continued on page 183*)



SAMPLE DISTRIBUTION through schools was for years the cornerstone of Colgate merchandising policy, popularizing tooth brushing. Millions of these trial-sized packages (shown here in three vintages) were given away and thousands of brushing demonstrations staged in schools.

BACK COVER of 1916 *Ladies Home Journal* illustrates Colgate's package of that date, as well as its early advertising approach. Few American products have consistently had so many advertising dollars expended upon them and this factor should not be overlooked in analyzing the success of Colgate Dental Cream over the years.

TRICKY SHAPES are necessary for dime-store sales appeal. These private-mold perfume bottles, which elsewhere might be filled by hand, are handled automatically at Joubert Cie

LIPSTICK CASE is of design favored by expensive brands, but this Irresistible product sells for 39 cents because assembly of parts is a mass-production operation conducted right in the cosmetic plant.

Economy through mechanization

A SMALL COSMETIC FIRM PRODUCING 25,000,000 PACKAGES A YEAR

DEMONSTRATES HOW TO MAKE A PROFIT IN THE DIME-STORE MARKET

With the steady growth of the variety store as a marketing medium, there are today many instances of small companies producing low-cost items in highly competitive fields where attractive packaging is an important factor. With the profit per unit very small, these companies depend on big volume and it is, therefore, necessary that they control their packaging costs carefully. Efficiencies in the packaging lines of these companies mean much, since that is almost the only place where economy can be achieved without endangering the quality of the product by cheapening it.

One such small company is Joubert Cie, Inc., New York, manufacturer of the Irresistible and Blue Waltz perfumes and cosmetics, which are sold only to variety stores, competing with highly advertised brands. Joubert has developed its packaging program into a highly efficient operation by adopting many of the procedures used in other fields by much larger companies.

For many years the variety store market was considered more or less a stepchild by manufacturers of nationally known cosmetic brands. One of the few companies that saw early the potential lucrativeness of five- and 10-cent toiletries was Joubert Cie, Inc., which proceeded in the 1930s to establish its two brands in dime stores from coast to coast.

The fact that the Joubert Cie plant turns out an average of 25,000,000 packages a year is a good indication of the extent of its operations. While it is obviously a profitable operation, the number of packages is not a true index of dollar volume, since price per unit is so low.

Starting originally with perfume only, the Blue Waltz line now includes lipsticks (10- and 25-cent sizes), face powder, talcum powder (10 cents), solid and liquid brilliantines (10 cents) and toilet water (25 cents). The Irresistible line has all of these items plus 10-cent sizes of cold cream, vanishing cream, dry skin cream and hand cream and a new 39-cent lipstick. The perfumes in each line are available in 10-cent, 25-cent and $1 sizes.

The company learned early in its history that packaging cost was a highly important factor in determining

tal cost of goods. In order to control this cost factor, Joubert Cie has constantly improved its packaging lines by installing equipment—often custom built—to keep up with faster production and has reduced certain expenses encountered by most cosmetic manufacturers by assembling package components right at the plant.

Package design requirements

Before describing some of these innovations in the packaging lines, let's look at the packages themselves.

Sophisticated color schemes are not for these packages, nor originality of design or compactness in size.

Brilliant colors in big splashes are eye-catching elements essential for the products if they are to hold their own on crowded dime-store display counters. Vivid pink and blue hues, floral designs or the illustration of a dreamy couple dancing the "Blue Waltz" may be "schmaltz," but it helps sell the product in this market.

Even though the amount packaged may be small, the package must look big and important, without being actually deceptive. For example, the three- and five-piece set boxes illustrated sell for no more than the cost of the individual items. Specially designed printed cover paper used for the outside and embossed gilt cover paper for the inside die-cut platform of these large set-up boxes were consciously planned to give flair and color. The most successful dime-store packages are those which follow the package design trends for the higher-priced cosmetics. Thus, the company has had private-mold bottles designed for its perfumes and colognes. For one perfume gift package a cover of transparent cellulose acetate was used to show off a flower-decorated bottle standing in a paperboard base that was covered with embossed gold-colored foil. This eye-appealing package was widely displayed on variety store counters and in windows. Even the cards to which lipsticks are stapled are kept up-to-date in the "sell" copy and illustrations.

Packaging for both lines is designed to carry out the "family" identity of each, with powder boxes, set boxes, labels, etc., having the same basic background pattern—the dancers and the heart motif for Blue Waltz and the floral pattern for Irresistible.

With one exception, packages are redesigned frequently, adapting package styles in vogue in the higher priced cosmetic lines. Designs for export items—the company has a big foreign market—are retained intact because experience has shown that even minor design changes cause foreign buyers to suspect the item is an imitation.

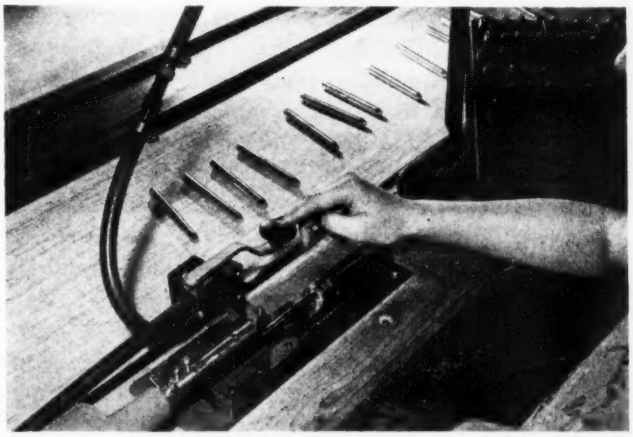
Plant layout economies

The plant in which these millions of packages are produced is highly mechanized, thereby eliminating much costly hand labor. An outstanding feature is the extensive use of conveyors, most of them custom built, on the packaging lines. Some of the conveyors have been planned and installed so that the lines have mul-

Lipstick-case assembly

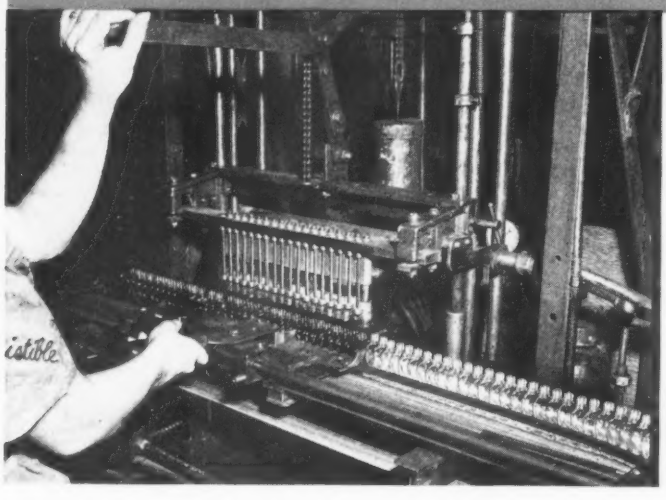
PHOTOS COURTESY JOUBERT CIE, INC.

PNEUMATIC MACHINES are operated semi-automatically. Here a pusher pin is being riveted into a cup holding lipstick. Conveyor belt moves cases from one operation along to the next.

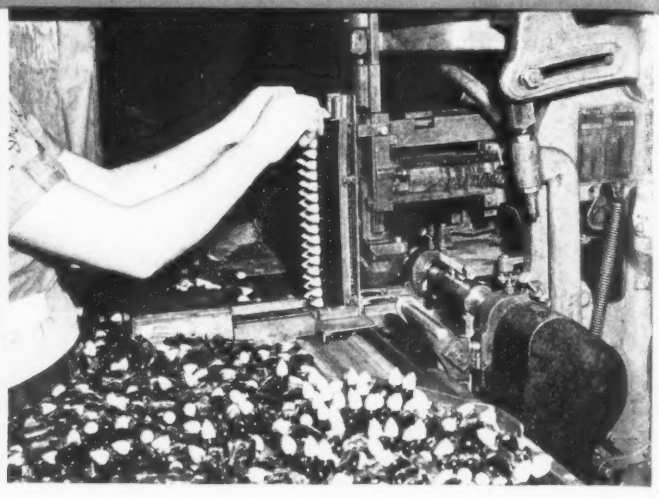


FINAL OPERATION on 39-cent lipstick is adding filled plastic barrel, complete with metal cap, to metal base. Air pressure is used to force base over the barrel end, in front of the controlling key.

OVER-ALL VIEW of lipstick-filling lines. Bases with lipstick up, B shell, etc., have been assembled in short lines ahead of the filling lines and are brought here in trays—one of the few operations where handling is non-mechanized.



PERFUME FILLER for 10-cent perfume bottles is a custom-built, semi-automatic, 18-head machine. To hold bottles under filling heads, a shuttle-like metal jig was devised. Special metal guide bars keep them upright on conveyor.



MAGAZINE FEED for automatic labeler was designed to handle smallest perfume bottles. Bottles are shunted off conveyor onto table; after being labeled, they drop back onto belt that carries them to shipping cases.

tiple uses. For instance, when the new 39-cent lipstick was put into production, the line was set up utilizing the same conveyor belt which the creams line uses. This flexibility enables the company to meet rush orders easily and to change from one product to another without extensive packaging line realignment. Since the conveyor system has been organized, production has been tripled, according to Jack Greisman, plant manager.

The tray-lot method of transferring materials to workers has been reduced to a minimum. The over-all saving effected by this change from tray-lot handling to continuous flow on conveyors is estimated by Mr. Greisman to be 50%.

Automatic filling and labeling machines, most of them modified to handle the peculiarities in shape of the private-mold bottles, are installed for straight-line operations. Use of automatic labeling machines alone is reported to have reduced hand labor 300%.

The company assembles and fills its own lipstick cases, an operation often done for other cosmetic companies by a contract packager. Joubert Cie also has automatic machines at the plant for inserting liners in the perfume bottle caps. Both of these package-assembly operations have reduced costs—20% on the lipstick cases and 50% on the cap liners.

Most of the manufacturing department is on the second floor of the plant, and mixed and blended dry or cream materials either flow down to the packaging department on the first floor through pipes and chutes or are brought down in bulk containers.

Packaging supplies are delivered to the lines from the receiving department at the rear of the first floor and the general movement of work runs in a U-shaped arrangement, with supplies being brought to the front and the direction of the lines going toward the rear to the shipping department.

Each of the nine bottling lines is approximately 50 ft. long, occupying about half of the area of the first floor. In addition, there are three more conveyor-belt lines alongside the bottling lines that are used in assembling set boxes, gift packages, etc. The lipstick molding department is located at the extreme front of the first floor with the lipstick case assembly and filling lines directly back of it.

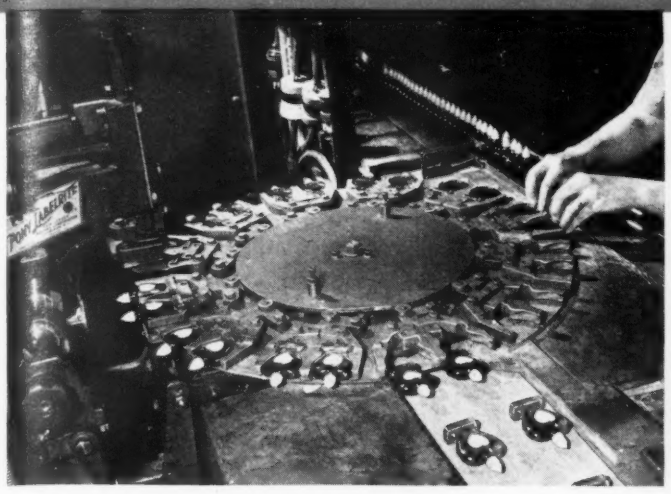
Liquid filling lines

Each scent of the perfume and brilliantine liquids is pumped through an individual pipe—always the same one in order to avoid mixing odors—from the mixing room into a stainless steel tank above the multiple-head filler on each of the nine bottling lines. At the heads of most lines, where the bottles are emptied from their reshippers and placed on the unscrambling table, there is an overhead belt conveyor upon which the empty shipper is placed and carried to the end of the line ready for repacking.

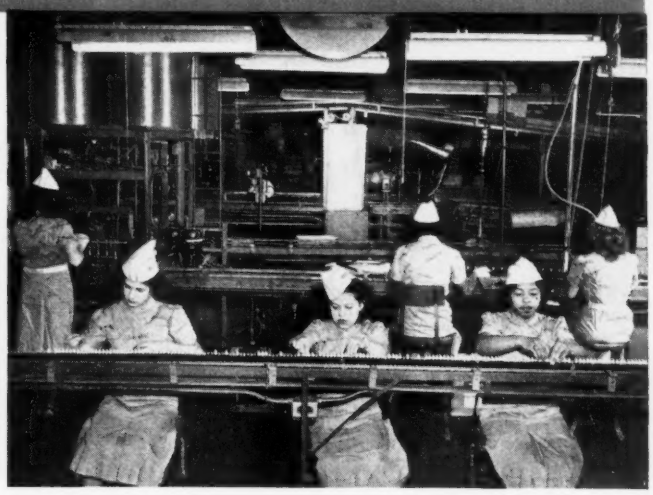
Feeding the perfume bottles on the conveyor for the bottling lines was a problem for Blue Waltz because of their size and shape. To keep them from toppling over or jamming, metal guide bars were specially designed. Installed above the conveyor-belt surface, these bars catch the bottles just above their small bases. The Irresistible bottles travel through on their long axis; the Blue Waltz bottles, on the short axis.

Positioning the small-sized bottles under the filling heads is facilitated by the use of a shuttle-like metal jig with cut-outs for each bottle. As the infeeding bottles approach the filler, the operator moves this jig to the right to pick up the required number and then

liquid-filling lines



ROTARY DIAL feed mechanism was devised to hold larger, unusual-shaped bottles passing through labeler, where labels are applied two at a time. Flange on center pivot trips release to drop labeled bottles on discharge belt.



OVER-ALL VIEW of perfume and brilliantine lines. Hand application of bottle caps was found more economical than machines in this case. By capping bottles manually, breakage for entire line is kept to less than 1%.

draws the loaded jig back to the left into proper filling position.

On the lines handling the small 10-cent Blue Waltz bottles the custom-built, semi-automatic fillers have 18 heads. The 25-cent sizes for both brands are filled on machines with 14 heads and an 11-head filler is used for the small 10-cent size Irresistible bottle. Lines for the two smallest bottles are capable of operating at the rate of 100 per minute. For the larger bottles 60 per minute is the normal operating speed.

Speed of the bottling lines would be greater if it were possible to cap the smallest bottles automatically. To date, according to the company, machinery designed for capping the bottles automatically has not proved satisfactory when installed in the lines, breakage being excessive. By capping the bottles manually, breakage for the whole line is kept to less than 1%.

On the brilliantine filling lines, where stock bottles are used and where the bottle mouth is sealed with a paper seal as it is capped, the complete operation is automatic.

At the point where bottles move past operators who apply the caps, the company has rigged up a simple closure-tightening device over the conveyor which consists of two rubber pressure pads several inches long, mounted close enough together so that when the bottles pass between the pads, the caps are given a final twist.

Vacuum label pick-up type automatic labeling machines used by the company are modified to handle the difficulties of feeding the private-mold bottles. On the smallest Blue Waltz bottles a magazine feed has been designed which enables two bottles to be labeled simultaneously. The small Irresistible bottles are fed in by pushers and for the larger bottles of both brands, a rotary dial feed has been designed. In each case the bottles are cupped by the mold pieces of the infeed mechanism.

The magazine-feed arrangement is illustrated on Page 106, together with the accumulating table in the foreground from which the operator picks up the small Blue Waltz bottles. After being labeled, the bottles drop back onto the conveyor belt which carries them to the end of the line. The rotary dial-feed mechanism is illustrated above. After passing the labeling machine, the bottles are discharged from the dial cups onto the conveyor by means of the extended flange of the solid center disk. When the revolving dial swings around to this "jog" the release screw is tripped and the two-section mold cup opens, releasing the bottles.

At the ends of the conveyer lines the bottles are cartoned by hand as they are inspected and the filled shipping cartons sent through automatic case sealers.

Lipstick lines

Assembling the component parts of the lipstick cases and filling them right at the plant is one of the outstanding economies Joubert Cie has found.

There are three lipstick lines, one for each size—10 cent, 25 cent and the new 39-cent professional size. For the 10-cent and 25-cent sizes, two short assembly lines are used directly ahead of the actual filling lines. There the brass bases with the name and shade stamped in the bottom, the cups of cellulose acetate holding the lipstick, the B shell (the inner shell with the swivel mechanism) and the outer polystyrene barrel are assembled semi-automatically by operators who fit the proper pieces together and nib them into place, using air pressure devices. Trays of the complete lipstick-case bases are then transferred to the filling lines, where operators

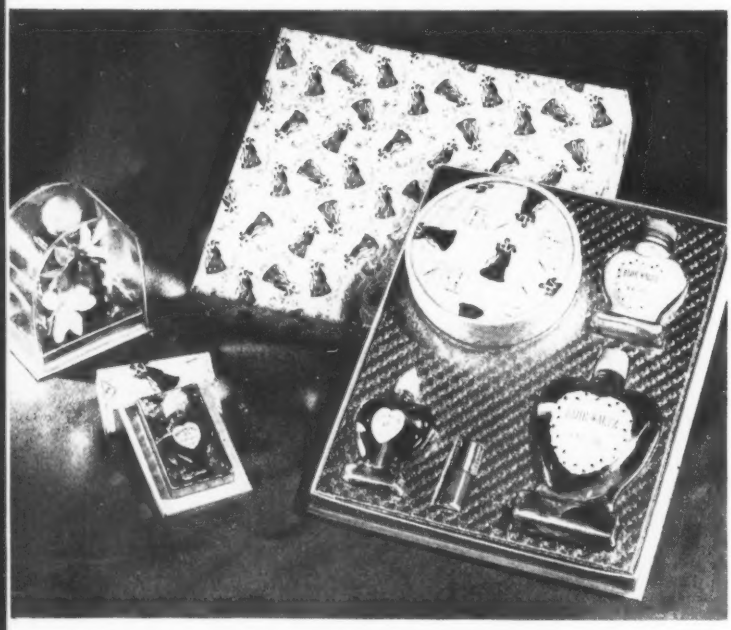
add the molded lipsticks to the acetate cup, test the filled bases to make sure the swivel shell works and place the filled bases on the belt conveyor with the lipstick exposed. Traveling upright on the belt, the lipsticks pass flaming stations where they are glazed and go on toward the end of the lines where inspectors add the metal cap. At the end of the line, the lipsticks are stapled to cards and packed in cartons.

Maximum production per line for the 10- and 25-cent lipstick lines is approximately 120 gross per day, each line having from 15 to 17 operators.

The 39-cent lipstick line—the one that can also be used for packaging the creams—has a U-shaped belt conveyor. Along one side of the conveyor, the top half of the lipstick is assembled and the lipstick itself added; on the other side, the labeling of the base and the assembly of the base and top are completed. At the beginning of the line, operators assemble the small metal cup which rides up and down in a polystyrene barrel, riveting the tiny pushing pin into the cup and nibbing the cup and barrel together after the cup has been snapped into the barrel so that it will not slip. Trays of these pieces are sent along the conveyor to the stations ahead where the girls insert the lipstick, flame it and add the metal cap.

Thus protected, the complete top half of the case can be placed loose on the belt which carries it around the turn of the U and down the other side for the final assembly operations. Near the turn of the conveyor is the labeling machine which applies the paper labels indicating shade to the brass base pieces. Air pressure is used to force the end of the plastic barrel into the metal base piece. On Page 105 the pieces are in position to be combined, the exposed barrel end being seen just in front of the control key.

SET BOXES designed as inexpensive gifts use vivid colors, sentimental designs, bright metallic papers for mass-market, dime-store appeal.



Completely assembled and filled, the lipsticks then continue on the belt to the end of the line where they are carded, packed in chipboard cartons and cased.

There are 19 work stations on the line, four or five girls doing each part of the assembly. Capacity of the line is 95 gross daily.

Powder packaging

Packaging of the face, bath and talc powders is done in a separate room off the main packaging floor. Here the gravity-feed chutes are employed to get bulk powders from the manufacturing department to the powder-filling-equipment hoppers. This part of the packaging department is relatively conventional. There are five short lines, each with standard powder-filling machines at the ends and belt conveyors running the length of the work tables.

Summary

From the standpoint of the packages themselves, the packaging-line efficiency at the Joubert Cie plant has enabled the company to spend money on private-mold bottles, specially designed cover papers, fancy set pieces, etc., so that its products are attractively packaged for their particular market.

Joubert Cie, Inc., has been able to package its cosmetics most economically and efficiently by mechanizing its lines to an unusual degree. By doing assembly work on some of its packages in the plant—such as lipstick cases and liners for closures—the company has cut its package material costs. By installing conveyors and automatic equipment and by modifying standard models of machines to handle its particular packaging problems, the company has attained a high degree of efficiency. It is true that the company has not done all of this overnight. Set-up of the present lines has evolved over a period of time. But the important lesson is that the company has advantageously adopted the same packaging line techniques on a small scale that larger companies use on a larger scale.

CREDITS: ***Machines***—*Adhesive applying machine for brilliantine bottles, Ferdinand Gutmann & Co., Brooklyn; labelers, New Jersey Machine Corp., Hoboken, N. J.; liners, A. Johnson Machine Works, Inc., Brooklyn; stapling machines, Boston Wire Stitcher Co., Westerly, R. I.; powder-filling machines, Stokes & Smith Co., Philadelphia, and F. J. Stokes Machine Co., Philadelphia.* ***Adhesives***—*National Adhesives, New York.* ***Bottles***—*Hazel-Atlas Glass Co., Wheeling, W. Va.; Swindell Bros., Inc., Baltimore, and Maryland Glass Corp., Baltimore.* ***Closures***—*Coll's Mfg. Co., Hartford, Conn.; Mack Molding Co., Wayne, N. J., and Ferdinand Gutmann & Co.* ***Liners***—*General Felt Products Div., Standard Cap & Seal Corp., Brooklyn.* ***Labels***—*Richard M. Krause, Inc., New York; Meehan-Tooker Co., Inc., New York; Tompkins Label Service, Philadelphia; Kaltman Press, Inc., Woodside, N. Y.; The Foxon Co., Providence, R. I.; Addison Lithographing Co., Rochester, N. Y., and American Decalcomania Co., Chicago.* ***Set-up boxes***—*F. N. Burt Co., Inc., Buffalo, N. Y.; Imperial Paper Box Co., Brooklyn, and Joseph Rubin & Sons, Brooklyn.* ***Cover papers***—*Hampden Glazed Paper & Card Co., Holyoke, Mass., and Kupfer Bros. Co., New York.* ***Powder boxes***—*F. N. Burt Co., Inc.; Joseph Rubin & Sons and Martin Paper Box Mfg. Corp., Brooklyn.* ***Talc cans***—*American Can Co., New York, and Federal Tin Co., Baltimore.*

Unbreakable nursery bottles

BOTANY MILLS IS CAPITALIZING ON AN OBVIOUS ADVANTAGE OF POLYETHYLENE IN ITS BABY LINE

COLORFULLY PRINTED in pink or blue, these stock bottles carry Botany's W-o-o-l-y Lamb featured in company's current television shows. Closures are of the convenient shaker type, made of phenolic plastic.

DISPLAY CARTONS have been designed for counter selling of the three products separately. Lotion, powder and two cakes of Botany Brand Lanolin Floating soap are boxed, make an attractive baby gift item.

The packaging of Botany Mills' new baby products should be a sure-fire hit with mothers. The famous woolen and worsted mill, which obtains lanolin as a by-product, is putting its Lanolin Baby Lotion and Powder for nursery use in unbreakable bottles of polyethylene.

The packages are stock bottles of polyethylene, simply and tastefully printed in pink for the powder and blue for the lotion, carrying a line drawing of Botany's W-o-o-l-y Lamb used as an animated cartoon character in Botany television shows and other advertising.

The convenient standard dispenser and shaker-type closures of phenolic plastic are used on the bottles, which are not intended to be used as a "squeeze" bottle, but merely to be unbreakable if knocked or thrown on the floor.

The unbreakable packages require no interior packing, which reduces packaging costs. Because they are smaller than similar glass bottles, their displacement is less. These savings help to offset the higher cost of the polyethylene bottles, which the company says is considerably more than glass, although this was not a factor in the selection. "Botany" Lanolin Brand Products are a quality line and, as such, the company wanted something better than average for the packaging.

The two bottled products and "Botany" Brand Lanolin Floating baby soap are put up for counter selling in attractively designed folding display cartons, die cut in one piece, which can be used as sturdy shippers. Color schemes throughout are pink and blue, suggesting the products' suitability for either boys or girls. The display cartons for the polyethylene containers feature "In The Unbreakable Bottle" on the face of the carton when it is opened and placed on the counter.

In addition to the counter units, Botany packages plastic bottles of lotion and powder and two cakes of soap in an attractive set-up box, which makes an ideal gift package for baby departments. Tops of the boxes are pink, printed in blue, and have blue bases, thereby also being suitable for either a boy or a girl baby.

The baby products are the latest addition to Botany's regular line of cosmetics, which was instituted as part of Botany's Products Division some 10 years ago, shortly after this mill became the first textile mill in the United States to recover and convert into lanolin the oil extracted from wool during the cleaning process and started cosmetic manufacture from this by-product under its own brand name.

CREDITS: *Polyethylene bottles, Plax Corp., Hartford, Conn. Closures, The Grigoleit Co., Decatur, Ill. Display cartons, Richardson Taylor-Globe Corp., Cincinnati, Ohio. Set-up boxes, Garfield Box Co., Passaic, N. J.*

MP DESIGN

Plastic eyelash-curler case

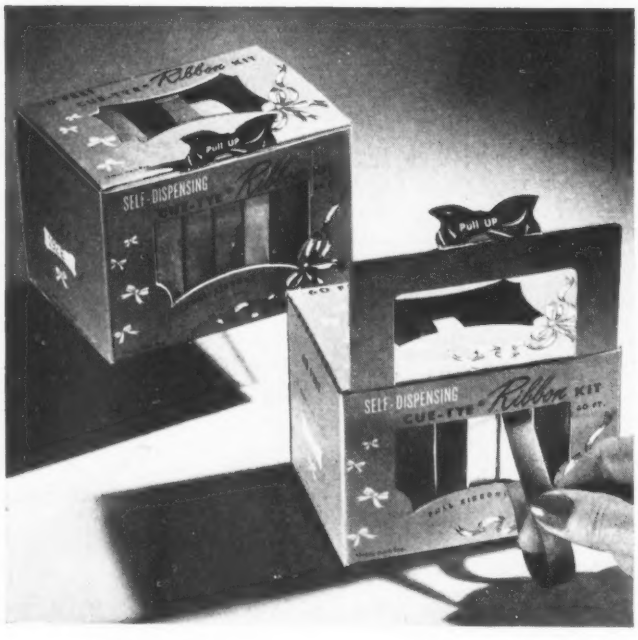
An unusual application of polyethylene plastic is this case for an eyelash curler produced by the Kurlash Co., Inc., of Rochester, N. Y.

The case conforms to the shape of the curler and is fitted with a tongue-and-bridge closure that is convenient and easy for the user to open and close. Kurlash, the company name, molded right on the closure tongue, provides the case with trade-name identity.

Polyethylene was selected as the material for the molded case because its characteristics provided the necessary requirements sought by the manufacturer. It is a strong, durable and exceedingly tough plastic and has the advantage of ease in production. The plastic material is translucent, so that the eyelash curler is visible from within the case when displayed on cosmetic counters. Slight coloring added to the polyethylene gives the product greater eye appeal.

CREDITS: *Case molded by Monroe Plastics Co., Inc., Rochester, N. Y., of Bakelite Corp. polyethylene.*

Home-use dispenser kit for ribbon



Cue-Tye Ribbon Kits offer the busy housewife an assortment of different colored ribbons in a convenient two-window, home-use dispensing package.

Two kits, each retailing for a dollar, have been introduced by Commercial Ribbon & Fusing Corp., Brooklyn, as a novel means of encouraging multiple-unit sales. One package contains an assortment of various colored ribbons for everyday use; the other, ribbons suitable for Christmas gift wrapping. Each package holds five 12-ft. spools of ribbons.

To withdraw any of the ribbons, the user raises the side "window" by pulling up the die-cut, bow-shaped tab which is part of a separate inner side panel of the paperboard carton. This panel, with its cellophane window, slips between the die-cut side wall of the carton and the ribbons. After the desired length of ribbon has been dispensed and cut off, the panel is pushed down again to keep the ribbon dust free.

CREDIT: *Boxes, Brooks & Porter, Inc., New York.*

HISTORIES

Baby-rattle powder can

For years mothers have distracted baby's attention from the unpleasant task of diapering by giving him the baby-powder can to play with. Now the Mennen Co., Newark, N. J., capitalizes on this custom and adds a real sales-appeal feature by actually building a rattle into the top of its baby-powder can. With the inscription: "I'm a rattle. Shake me." the package becomes practically irresistible.

The rattle feature is very simply achieved. The neck of the regular metal powder can has been elongated and over it is slipped a rectangular collar of molded pink cellulose acetate butyrate. The collar is serrated around its center opening so that it slips easily into place; it is then held firmly in place by the attachment of the metal shaker cap. Trapped inside the collar are small plastic beads, which rattle against the can.

CREDITS: *Plastic rattle top molded by Park Mfg. Co., Linden, N. J., of Tennessee Eastman Co. "Tenite II" cellulose acetate butyrate. Cans, Continental Can Co., New York.*

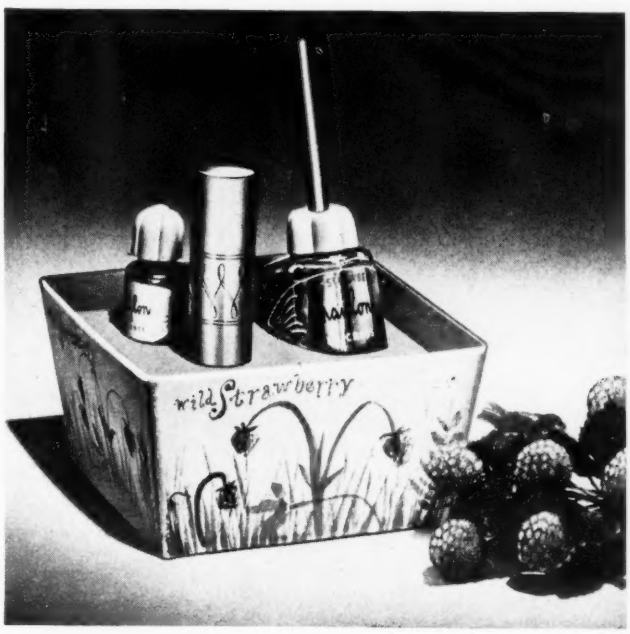
Paperboard strawberry box for cosmetics

The beauty business has borrowed a package from the berry grower. La Cross is presenting, fancy-fruit fashion, in small boxes shaped like strawberry boxes its newest shade of Naylon nail polish and lipstick—"Wild Strawberry."

The two-color printed box carries out the strawberry motif in red and green as the decorative design. Made of white coated board, the folding carton has a separate die-cut platform recessed in the box to hold the nail polish and lipstick plus an introductory bottle of a base-coat nail preparation. Platform is green to add to the illusion of the items being "nested" in grass.

For shipment, the strawberry box is fitted with a die-cut and folded chipboard guard that slips over the tops of each of the three items to hold them in position. The unit is shipped to retailers in a folding carton designed with the same red and green strawberry motif used on the berry-shaped box.

CREDIT: *Box and carton, Disbrow Mfg. Co., Inc., East Orange, N. J.*



NEW DESIGN goes completely modern, features strikingly realistic full-color reproduction of end product. Lace doily background gives added appetite appeal to cake; motif is repeated in copy spots on side of package and price spot on top. These packages won Special Honorable Mention in the Food Division of 1949 Folding Paper Box Assn. competition.

Gumpert's cake mixes

PACKAGE TRANSFORMATION REFLECTS A COMPANY'S EDUCATION

IN THE VAST DIFFERENCES BETWEEN INSTITUTIONAL AND CONSUMER SELLING

When the S. Gumpert Co., Inc., Ozone Park, N. Y., started in the food business a half-century ago it didn't matter much how their product was packaged. In the early days Gumpert made basic cake mixes which were sold, in the institutional size and style of package, to bakers only. What the housewife brought home was the end result, which she saw in the baker's window—a beautiful cake made, probably, from Gumpert ingredients. The cake itself needed no package to catch the eye, excite the palate and invite purchase.

Bakers liked Gumpert mixes; over the years the Gumpert business grew and prospered. Along came World War II and the Government sought quality cake mixes to be sold, in unit packages, in commissaries as morale builders for military families. Gumpert's was prevailed upon to package its products in unit sizes.

PHOTOS AND TIP-ON COURTESY LORD BALTIMORE PRESS

They entered this market with a brand name that was completely unknown to Army personnel and their wives—except in the rare instance that a soldier might have been connected with the baking industry in civilian life. They had done no consumer advertising whatever and had established no consumer brand recognition and acceptance. The company's packaging experience was confined to the quite different problem of packaging in bulk lots for bakers and packaging merely adequately for protection and identification, with no thought of eye appeal.

Ready availability, plus the quickly established quality of the contents, made up for the deficiencies that this first package had appearance-wise. Sales in the commissaries grew by leaps and bounds during the war years. At war's end, Gumpert's faced the problem of maintaining sales volume at the level to which they had become accustomed. This problem grew as established, well packaged brands of mixes began to invade the the Army market postwar.

In deference to their long-standing institutional trade

DRAB PACKAGES originally used were accounted for by fact that Gumpert, well known to bakers, had never sold mixes directly to consumers until wartime demand placed them in Army commissaries. Package at right was an attempt to improve on original, but was a far cry from the colorful and eye-appealing 1949 package design.

with the bakers they would not go, Gumpert officials decided, into the supermarkets, groceries and chain stores, but would concentrate instead on the narrower, but world-wide Army-commissary distribution system in which they already were established. Package improvement, they knew, would be required if they were to hold their place in this market against competition. They began to develop and test new package designs.

The original wartime package is shown at the left in the illustration at the bottom of the opposite page. Its deficiencies are obvious. Rough folding boxboard was printed by letterpress in a washed-out orange-red and black color combination. There was no illustration. Worst of all, the main display panel didn't even identify the contents. The Army wife was expected to know that "Gumpert's" meant cake mix. The only positive contents listing appeared in the line "Quick Cake Mix" on a side panel, with a block of fine print below giving directions for mixing.

Gumpert's were not misled into thinking that quick acceptance of this package was an endorsement of its design; in wartime shortages, they realized, anything would sell—particularly any product that contained eggs, sugar, shortening and other scarce ingredients. The postwar buyers' market would be a different story.

Certainly, better identification of the contents, with an illustration to create eye appeal, would be the first step. The package at right in the illustration appearing at the bottom of the opposite page, marked "transition," shows the result of the first stab at improvement. Although it did identify contents and did picture the end result, it was in some respects worse than the original. The line-cut illustrations were very small and unrealistic. The same orange-and-black color scheme, completely lacking in appetite appeal, was retained. The design in general lacked a focal point, which the original at least had.

About that time Gumpert officials made a survey of buying habits in Army posts in many localities. They found that, with the war's end and the greater abundance of products to compete in every line, the commissaries had become very much like supermarkets. Army wives chose between brands largely on impulse, influenced by the package's eye and buy appeal. They decided to get expert advice and create a colorful package that would—in the words of an old Wheelerism—"sell the sizzle, not the steak." They would present, on the face of their package, a full-color picture of the kind of cake that they knew could be created from the otherwise drab-looking contents of the package.

Studying other packages on supermarket shelves that had achieved similar pictorial effects, they were struck by the tempting realism of reproduction made by the patented Fidel-I-Tone process of ultra-fine-screen lithography on boxboard. They approached the carton maker who developed and introduced this process several years ago[1] and eventually placed the whole package problem in his hands.

The result is illustrated by the sample of one of the new Gumpert cartons which is attached to this page. The complete family of cartons for the nine varieties of cake mixes now being marketed is illustrated photographically on the facing page. They are now on the shelves of Army commissaries around the world and reportedly doing a big business there.

All product illustrations are in full color, the number of impressions depending upon the subject. Backgrounds are a combination of yellow (for the name panel and lower band) and one other color which is different for each mix variety. Adding to appetite appeal is the lacy white doily on which the slice of cake is "served up," appearing fresh from the oven. The lace doily motif is repeated in three copy spots along one side panel, stressing that the (*Continued on page 194*)

ACTUAL SAMPLE of front panel of new carton shows mouth-watering realism of cake illustration, achieved by carton maker's special process for super-fine-screen printing on boxboard.

[1] See "Brilliant Reproduction," MODERN PACKAGING, Dec., 1945, p. 93.

Candy trademark

ONE-COLOR WRAPPERS DOMINATING MODERNIZED ZIEGLER LINE PERMIT SAVINGS TO GO INTO LARGER, IMPROVED BAR

VISUAL IMPACT of new Ziegler design is sharply revealed by this contrast between old and new "Giant" bar wrappers. Dull appearance of the former package is overcome by more effective color treatment. A reduction in the size of the brand name permits the incorporation of the new Ziegler seal on top of the wrapper.

George Ziegler Co., Milwaukee, has embarked on a broad new packaging program which includes a complete revision of all printed material. Theme of the new printing and package activity is a modernized rectangular Ziegler trademark "seal" developed by the package designer and incorporated in new designs created for eight lines of candy bars, the 24-bar cartons, general purpose bulk-candy cartons and three sizes of packaged boxes for the premium line of "Betty Jane" chocolates.

The new company-wide design treatment, first to unify all Ziegler products, will also be carried in all business forms, checks, bank drafts and stationery. It supplants earlier designs in use by the company for the past 10 years. With the new layout and colors styled for eye appeal, typified by increased visibility and sharper contrasts, the general appearance is one of freshness and faster impulse in registering on the buyer's mind.

On the individual bar wrappers, strong brand resemblance has been established by using the new Ziegler seal in bold reverse, with the logotype of the bar name and layout conforming to the trade name in general tone. Distinctive colors differentiate the various bar wrappers.

Redesign of Giant bar

The Giant bar, a sales leader in the Ziegler line, exemplifies the treatment the various individual lines of candy bars receive under the new program. The design organization responsible for the program analyzed the old color combinations and layout on the basis of three factors—attention appeal, character dramatization of the company and line, and portrayal of wrapper content. The merchandising significance of such a wrapper was tested and study showed that, according to today's standards, the old orange and blue design with black lettering outlined in yellow connoted "old stock" due to its drab appearance.

The new design also overcomes the long-and-narrow illusion of the old layout. On the theory that the wrapper must be pleasing to the eye in individualized style, yet distinctive in mass display, the colors selected were white, chrome yellow and Van Dyke brown for the wrapper. The trade name, "Giant," which previously covered the full expanse of the wrapper, was given greater visibility by utilizing only three-fourths of the top of the wrapper surface and by using a distinctive lettering that permits the name to dominate the wrapper.

Remainder of the top wrapper is devoted to the new seal and an identification of the Ziegler firm, with the ingredients brought into a more readable position on the face of the wrapper. Worked into the new wrapper seal layout are the words "finest candy," which give added interpretation to the seal.

Consideration was also given to the massed box effect in that the new wrappers collectively make an attractive and distinctive display with fast brand identity and a positive "sell" on the Ziegler line. The

similarity of the various boxed Ziegler bars, readily identified through the vertical stripings formed by adjoining wrappers, aids in merchandising related brands.

One-color wrappers are dominant in the new layouts, with the savings over the previous four- and five-color wrappers going into a slightly larger and improved quality bar.

Program includes other brands

Brands restyled in the current program include "Nikel," which is white on a bright blue, with the "K" having an original, medallion design. "Teaser" is dominated by a sharp Chinese red with white lettering and layout contrast, while the "Crunch-E-Mint" wrapper gets quick recognition through a color combination of mint green, chocolate and white. "Coconut Pie" completes the wrappers in a chocolate brown and fresh white, simulating the contrast of coconut and chocolate.

The similarity of the Ziegler 24-bar cartons is achieved by repeating the basic wrapper design on the exterior, with identical colors and layouts. The general purpose bulk-candy carton repeats the same motif, with a major section of the carton carrying bold stripes and with a multiple name strip-imprint across the box to identify the contents.

The quality "Betty Jane" line of chocolates embodies a distinctive cameo silhouette, which in shape is a subtle repetition of the Ziegler logotype. The imprint is black and gold on white.

CREDITS: *Design, Brooks Stevens Associates, Milwaukee. Cartons, carton wraps, bar wraps (except Giant bar), Traver Corp., Chicago. Giant bar wrap, Milprint, Inc., Milwaukee.*

MAXIMUM IDENTIFICATION is carried right to the point of sale. Note how basic elements of the wrapper design have been adapted to the surface of new 24-bar box (right).

FAMILY RESEMBLANCE is assured for other Ziegler bars by repetition of the basic design, while use of appropriate color combinations eliminates possible confusion by the customer.

TAKE-HOME

Light-weight, durable, full-sized furniture that can be collapsed and packaged in portable cartons has been developed as a new marketing idea by the Ritts Co., Los Angeles. Marketed under the trade name Pakitan, this line is believed to be the first in the furniture field to be sold in packaged form. There are important implications for the extension of consumer packaging to many similar lines of furniture.

Made of solid rattan, the group includes complete furniture for living room and dining room. The Pakitan line includes a three-piece sectional sofa, a lounge chair, a cocktail table, an end table, a dinette table and dinette chairs.

Packageability is achieved through legs and arms which are in some instances detached and in others hinged so that they can be folded back against a flat surface. In the case of the tables, for example, the legs simply fold on hinges. The chairs have a more complicated breakdown—the arms of the lounge chair are separated completely from the main body of furniture. In all cases, a minimum of effort is involved in assembling the furniture. At the most, eight screws are needed to assemble and make secure the detached members. On most of the items, hardwood braces are included to give stability to the assembled furniture.

Each piece of furniture is sold in an individual carton made of heavy corrugated board. The package has been designed with a simple, effective, contemporary treatment, which carries the trade name and the Ritts Co. logotype in a reverse panel. A picture of the individual piece of furniture contained in each package is reproduced on the exterior. The packages range in size from 13¼ by 24 in. to 36 by 36 in.

THIS IS A CHAIR. A dining room or coffee table can be packaged almost as compactly and a scored, fold-back handle on top edge makes carton easy to carry.

The packages are closed by stapling the end flaps. The end panels also give information about the color of the woven plastic strips which are used to form the seats and backs of the chairs. Each package has a scored, fold-back handle on one side, so that it can be carried as easily as a suitcase.

Consumer convenience of packaged furniture first occurred to Herbert Ritts, head of the manufacturing firm and himself a war veteran, when he realized that thousands of veterans who have not yet permanently solved their housing problems are moving about the country with great frequency. On the theory that the hardship and expense of such moves could be minimized by portable furniture, he developed Pakitan. The furniture itself is highly suitable to the specific needs of such consumers, since it is appropriately styled for small dwellings and is inexpensively priced in terms of today's market ($275 for the two rooms).

With Pakitan, reasoned Mr. Ritts, the low-budget family could move a major part of its household belongings simply by packing each piece of furniture back into its original carton and stacking the cartons in a car.

Other consumer advantages of packaged furniture are also being stressed in Pakitan promotion. It is anticipated that it will be widely used by vacationers to furnish a trailer, a summer home or a boat. Its adaptability as boat furniture includes the fact that none of the furniture is injured by water. Many persons with vacation homes, it is pointed out, do not want to leave furniture at such homes during off-seasons because of the possibility of theft or destruction by vandals. Pakitan makes it possible for them to move their furniture with them as they go from beach or mountain to city and back again.

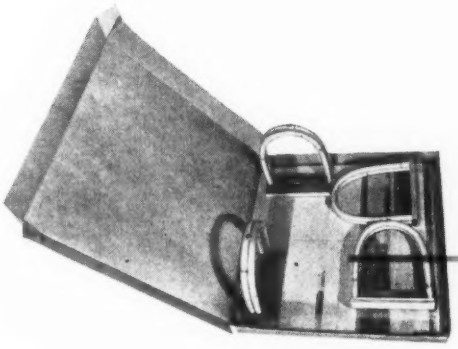
To the consumer, packaged furniture means that he can self-sufficiently take his furniture right home with him from the store when he buys it and from that moment on have complete mobility with it. But the consumer is not the only one who enjoys benefits from this innovation. To the furniture dealer it means that stock can be maintained with a minimum of space consumed. Deliveries are simplified and in many cases eliminated.

Finally, to the West Coast furniture manufacturer, whose possibilities of capturing a national market have heretofore been limited because of the shipping costs involved in sending the more cumbersome pieces across the continent, it means that now his output can be packaged and shipped flat, with great savings to him. If other West Coast manufacturers follow the example set by Ritts and design furniture which can be packaged

FURNITURE

A NEW MARKET THROUGH PACKAGING

IS FOUND BY DEVELOPING COLLAPSIBLE FURNITURE THAT IS EASILY RE-ASSEMBLED



for easy shipment, easy dealer handling and easy consumer use, they may find that they are, for the first time, in a good competitive position. The simple-to-pack, simple-to-assemble formula should be particularly useful for the outdoor furniture field, in which California manufacturers hold a key position.

First consumer presentation of Pakitan was made by the Barker Bros. stores in Southern California on Jan. 25. Ritts, which specializes in the manufacture of rattan furniture, plans to open up other accounts in leading markets throughout the nation. Sound reception of the line in Los Angeles, which was timed to coincide with the semi-annual Furniture Market Week there, indicates that other outlets will be established soon.

The possibility of adding other pieces of furniture to his packaged line is being developed by Mr. Ritts. Should these additions include sleeping equipment, it may ultimately be possible for the consumer to have a completely portable home.

CREDIT: *Cartons, California Container Corp., Los Angeles.*

ASSEMBLED, the packaged Pakitan line can provide all the furniture needed for a dinette and living room. Packaged, a whole house-full of furniture can be transported from store to home—or from house to house when moving—in a station wagon. Only eight screws are needed to assemble or disassemble largest piece in the line.

4 out of 5 choose oranges in t

Attractive — eye-appealing

Keeps oranges fresher and juicier longer

Strong, durable, tear-resistant

Holds more, increases unit sale

In a month's test in fifteen big super-markets, four out of five shoppers bought oranges bagged in transparent re-usable Pliofilm — *in preference over fruit packed in other containers.*

Similar results are being obtained on apples, onions, potatoes and other bulk produce packed in these handy new Pliofilm super-market bags.

Pliofilm—T.M. The Goodyear Tire & Rubber Company

these sturdy Pliofilm bags!

Transparent—customers see what they're getting

Fast-moving—no picking and choosing

Light, sanitary—washable for home re-use

Easily used on automatic bagging machinery

Test points way to sales increases on all types of bulk merchandise

Here's a tip for speeding up sales and turnover on all bulky produce that is difficult to package and display attractively.

Just as experience proves oranges, apples and other produce sell faster in Pliofilm, so will other products.

The reason is simple. In Pliofilm, people can see what they're getting. It keeps edible products fresher, tastier; can be washed and reused to keep vegetables, cheese, meats and other food items fresh for days longer. It stands up in shipment—isn't affected by weather.

Available in many shapes and sizes

Pliofilm produce bags can be supplied in any form or size to meet your need. If you have a packaging problem, let us recommend the right type of Pliofilm sales-boosting package. Address: Goodyear, Pliofilm Dept., Akron 16, Ohio.

Good things are better in

Pliofilm

3-way protection against air, moisture, liquids.

GOODYEAR

PACKAGING FILM

MODERN PACKAGING

1 With the re-introduction of Budweiser beer in quart sizes following a lapse of 14 months, Anheuser-Busch has adopted a one-way, non-returnable 32-oz. bottle. This convenient, light-weight, easy-to-handle bottle requiring no deposit, was designed to promote carry-home sales. Bottle, Owens-Illinois Glass Co., Toledo.

2 Amm-i-dent, one of the leaders in the big swing to ammoniated tooth powders, is packaged in a lithographed metal container neatly designed with an expanse of white space creating the effect of an ethical drug product. Trade name is prominently displayed at the top, with a box below explaining the new product. Container, Liberty Can & Sign Co., Lancaster, Pa.

3 A corrugated box with applied label forms the package for this floor maintenance kit developed by the makers of Johnson's Wax for small businesses having floor maintenance problems. Included with the four metal cans and cotton applier head is an illustrated step-by-step instruction card. Corrugated boxes, Hummel & Downing Co., Milwaukee, and Gaylord Container Corp., St. Louis. Label, Western Printing & Lithographing Co., Racine, Wis. Cans, American Can Co., New York.

4 Newest product of Arnold Bakers, Inc.,—Arnold Oatmeal Cookies—is packaged in an attractively printed, white glassine wax paper bag featuring the company's trade character, "Bob," dressed in Scotch kilts. Feature of the package is that, when empty, it may be re-used as a lunch or picnic container. Bag, Thomas M. Royal & Co., Philadelphia.

5 The success of the 40-yr.-old American Beauty hair tonic in a recent retail test in this new container, led The Odell Co. to market the product at retail for the first time. Previously it had only been dispensed by barbers in professional pint size. This 6-oz. hand-grip bottle has a red and gold label designed for masculine appeal. Carton design is patterned after the bottle label. Design, George Reiner, New York. Bottle, Pierce Glass Co., Port Allegany, Pa. Label, Barton Press, Newark, N. J. Carton, Disbrow Mfg. Co., Inc., East Orange, N. J.

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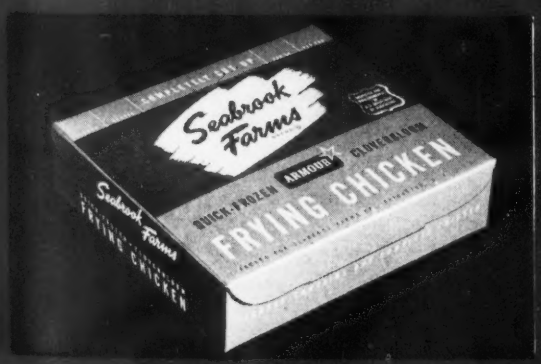
PAGEANT



6 Shulton's Early American Old Spice after-shave lotion now features an exclusive stopper of polyethylene affixed to the metal shaker top, said to make the bottle leakproof. The stopper is ideal for traveling, since there is no cork to slip, deteriorate or disintegrate.

7 Introduction of this printed transparent cellophane package for men's sports shirts marketed by Wally Riggs Shirt Co. is said to have stimulated extraordinary interest among retail outlets and has resulted in increased company sales. The design employs a sports theme in three colors—yellow, blue and white. Printed price tag is placed inside the package. Package, The Dobeckmun Co., Cleveland, Ohio.

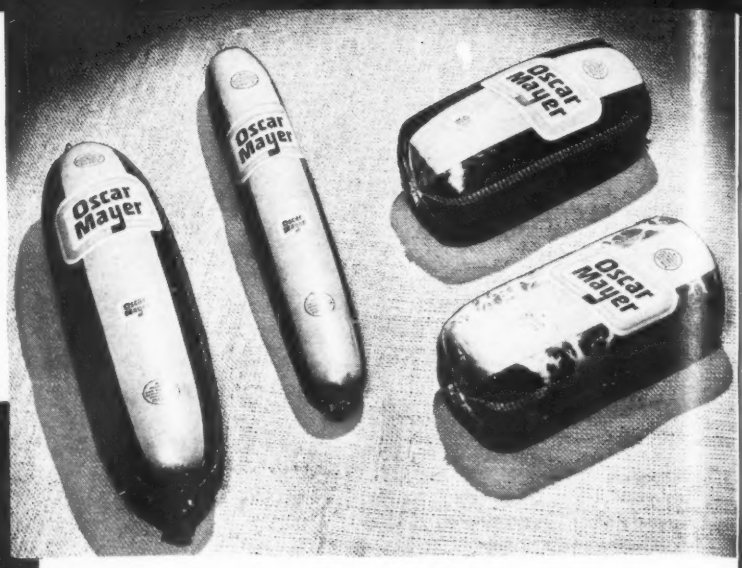
8 Oysters in their natural juices are being packaged by the Greenwich Oyster Co., Greenwich, N. J., in printed liquid-holding Pliofilm pouches, designed for self-service selling. Aside from providing full visibility of contents, the bag promotes the Greenwich brand-name identity for consumers. Pouch made by Shellmar Products Corp., Mt. Vernon, Ohio, of Goodyear Pliofilm.

9 Re-use tumblers, with labels covering only the upper section, enable the purchaser to see which of the five flavors of the new E-Zee cake icing is inside. Penn Syrup Corp., for years packers of fountain syrups and fruits, uses these containers to introduce their first consumer-sized products. Tumblers and closures (Anchorvac T Caps), Anchor Hocking Glass Corp., Lancaster, Ohio.

10 Through a new joint marketing arrangement by Armour & Co. and Seabrook Farms, the Armour Cloverbloom line of quick-frozen, cut-up fowl is being distributed through the Seabrook selling organization. Package design combines basic elements of the Armour design with a dominant Seabrook Farms panel.

11 This cylindrical-shaped fibreboard container with metal top and bottom, adopted by Shanghai Syndicate, Inc., for its Tien Foo Chinese tea, features an unusual label design. The background, an endless swastika design in white on gold, was secured from an old Chinese paper. Lettering is in gold and black on the center green panel. Label, Crocker-Union Division of H. S. Crocker Co., Inc., San Francisco.

MEAT CASINGS maintain the familiar "yellow band" theme, although here the band runs vertically. Note trademark repetition in small spot.

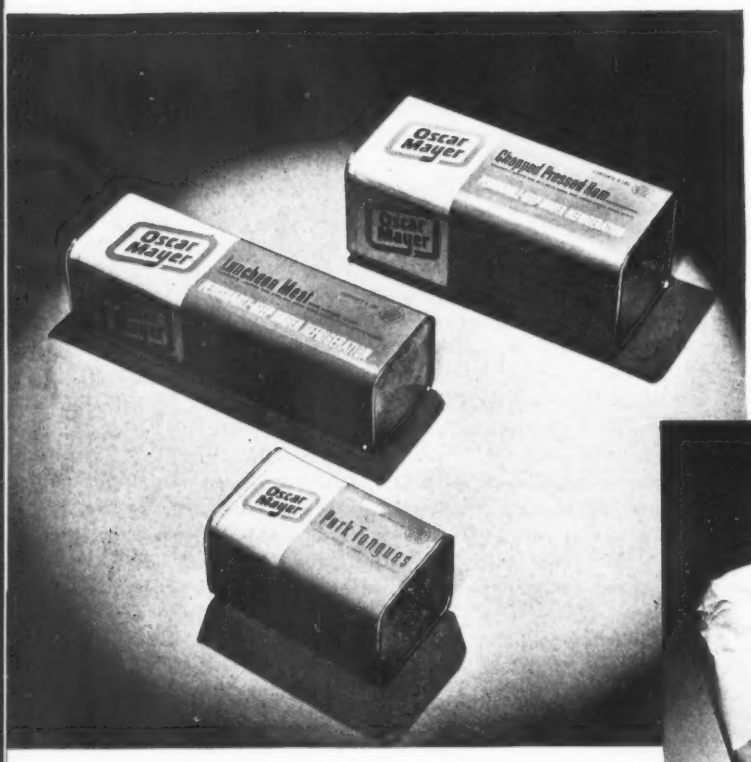


SIMPLE TRADEMARK logo highlights can labels; detailed copy is confined to side and back. Band is strong yellow; lettering is red. Note pictorial suggestion of two types of wieners.

Unmistakably

A NEW TRADEMARK AND A COMPLETE PACKAGE REDESIGN PROGRAM LIFT THIS MEAT PACKER'S PRODUCTS OUT OF THE ORDINARY

PHOTOS COURTESY ROBERT SIDNEY DICKENS & ASSOCIATES.



MODERN DESIGN is exemplified by these square tins for processed meat loaves, using plenty of clean white, yellow band, red lettering—and no brown.

HAM WRAPS present the forceful, uncluttered design very effectively. Clear distinction between the cooked and uncooked hams is obtained by a difference in the treatment of the bottom panel.

As a company grows and extends its sales activities into new areas, the need for unmistakable product identification becomes ever more pressing. Such is the case with Oscar Mayer & Co., Chicago and Madison, Wis., which has enjoyed more than half a century of progress and now ranks among the foremost of the nation's independent meat packing organizations.

The Oscar Mayer name has long been identified with quality sausage items, as well as bacon, hams and other smoked meat products. The company has worked consistently to develop improved methods of packaging in this field, having introduced the "Kartridg-Pack" method of banding wieners now in use by a number of firms throughout the country and the "Sack-o-Sauce" pack in which sauces for such products as

Mayer

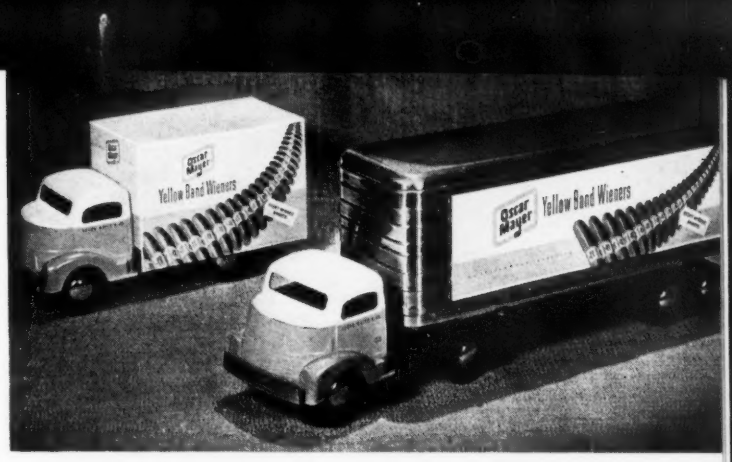
wieners are enclosed in a separate plastic bag within the can.

Desiring to unify its entire line of packages in the light of their heightened merchandising requirements, the company two years ago retained a design firm to restyle its complete family of packages. As the assignment was set up, it also included the development of designs for new products yet to be introduced. Altogether, more than 100 items were involved in the program.

The newly designed packages began to make their appearance approximately a year ago and were introduced in the company's regular distribution channels without fanfare. Because of the vast scope of this activity, new packages have been placed on the market at intervals. At the present time the bulk of the newly designed packages, wraps and labels have made their market appearance.

In the development of this packaging program, which was under the supervision of Carl Mayer, vice president and advertising manager, there were several important marketing problems to be considered. Among them were:

1. The need for good product identification, which was felt to be somewhat lacking in the former packages, plus good display value in the retail outlet and good retention value in the mind of the busy consumer.
2. The need for a package design that would have basic appeal for the feminine customer, who does the bulk of the buying. The old designs were recognized as brutally masculine in treatment.
3. Development of designs that would be effective throughout the 100 or so items involved, including a broad assortment of shapes and sizes.



TRUCK MODELS show how new trademark has been played up on everything that represents the company and also illustrate application of the new trademark to Mayer's "Kartridg-Pack" wieners.

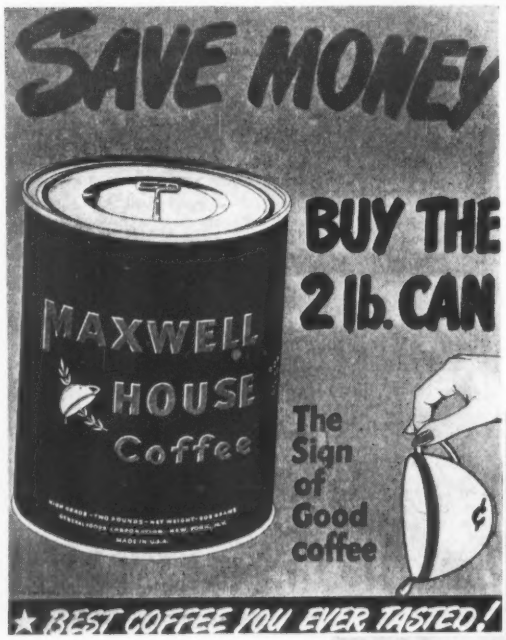
The design treatment was built around a simple logotype trademark with high identity value. It consists of the name, "Oscar Mayer," in a distinctive style surrounded by a rectangular shape in the form of a yellow ribbon, thus identifying the name with the yellow band.

Prior to redesign, the company's packages had utilized red, yellow and dark brown. In redesign, the dark brown was eliminated and the yellow was featured as an important element. This yellow color was believed to be the important recognition factor of the old Oscar Mayer packages that could be repeated and featured in the new packages. The red color was used strictly for the name and copy, thus taking the design out of the typical heavy red-and-yellow scheme that has been used by so many other packagers. Color studies were made to determine the ideal shade of yellow under all conditions—one having a clean look and at the same time being strong enough to effect a contrast against the white background.

As a basic design element, (*Continued on page 192*)

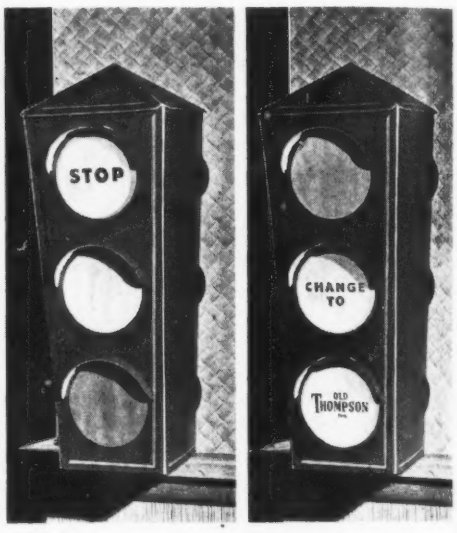
THE OLD

OLD PACKAGES were a classic example of clutter and poor relationship. Both the lettering and the red-yellow-brown color scheme were masculine and did not appeal to feminine shoppers.



The economy of purchasing coffee in 2-lb. cans is stressed in this display poster for Maxwell House coffee. Reproduction of the key-opening can dominates the display, together with the legend "Save money—buy the 2-lb. can." Display, Repro Art Co., Long Island City, N. Y.

The makings for old-fashioned cocktails, along with a bottle of Glenmore's Old Thompson whiskey, are featured on this three-dimensional display (below). Base is made of reinforced plaster, as are the orange and lemon glued to the base. Glass marble cherries in a jar and an old fashioned glass complete the display. At right is a flasher display of cardboard with a traffic signal motif advising purchaser to "Stop," then "Change to Old Thompson." Old-fashioned cocktail display, W. J. Smith Advertising Co., Louisville, Ky. Glass, Libbey Glass Div., Owens-Illinois Glass Co., Toledo. Traffic signal display, G. H. Jenssen, Chicago.



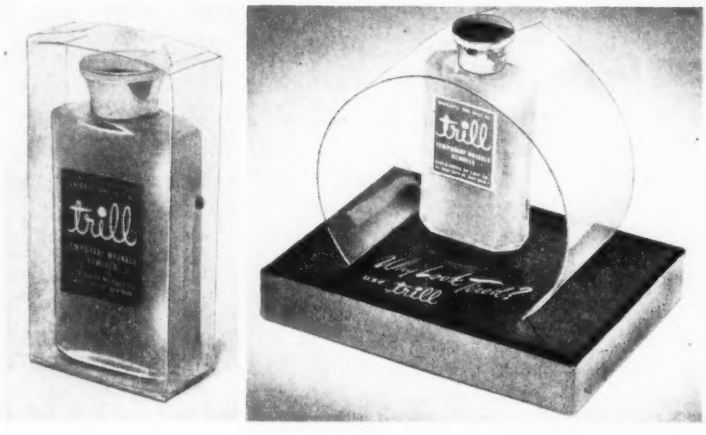
Designed to step up point-of-purchase sales, this display—one of a series of four just adopted by Park & Tilford—is a two-bottle unit conveying the suggestion of Park & Tilford brands as gifts. Six different types of greeting cards covering nearly every kind of gift-giving occasion, are offered to customers as an added free service. Actual bottles on either side of the display are held in place by die-cut pieces.

A folding carton with die-cut header piece forms a compact, colorful and effective counter display for Heide five-cent Jujyfruits candies. Yellow was selected for the new carton because of its high recognition value, breaking away from the traditional blue coloring. The red Heide diamond trademark has been retained. Display, Container Corp. of America, Chicago.

GALLERY

This three-unit window display for Pittsburgh Paints' Wallhide flat wall paint is one of a series of four built around the company's "Color Dynamics" promotion for color selection and illustrates paint uses with human interest. Practically life-size in dimension and printed in full color, these displays are for large windows. Miniature reproductions are available for counter use. Display, Hussey-Woodward, Inc., New York.

The new Sloane floor cleaner and wax is being introduced with this 10-color lithographed paperboard floor stand holding 70 lbs. of product in units from pints to gallon cans. This self-selling unit occupies a minimum of floor space. Display, Einson-Freeman Co., Inc., Long Island City, N. Y.

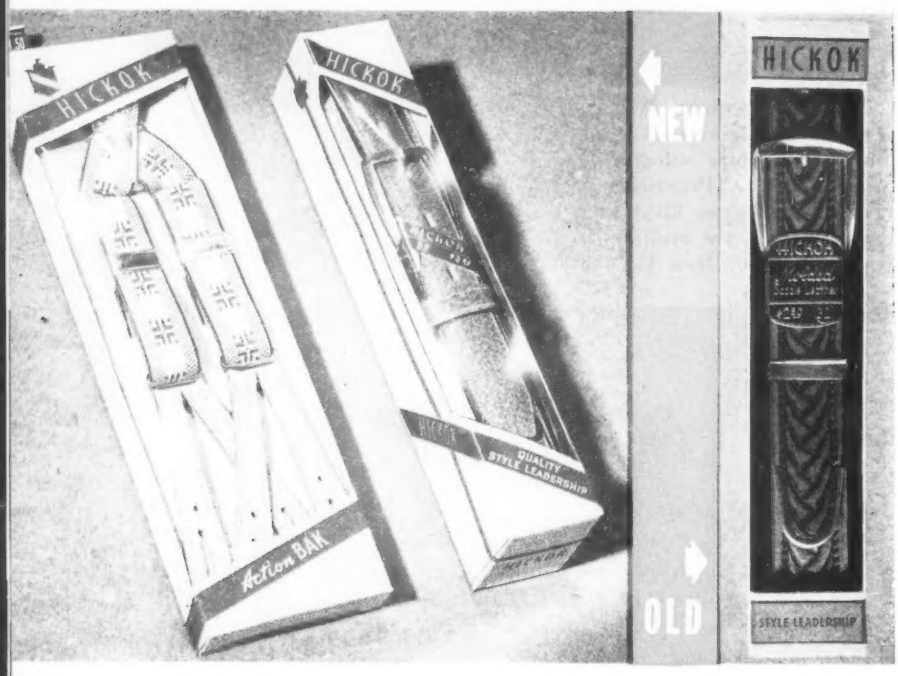


Trill, a new cosmetic for temporary removal of wrinkles, is packed in an acetate box (left) and displayed in a counter unit (right) featuring a bottle suspended from a transparent acrylic arch secured to a highly polished black base. Label and box design, Ben Lewis, New York. Bottles, Swindell Bros., Inc., Baltimore. Closures, Richford Corp., New York. Box and display, Enterprise Box Co., New York. Embossed labels, Arkadia Label Co., New York.

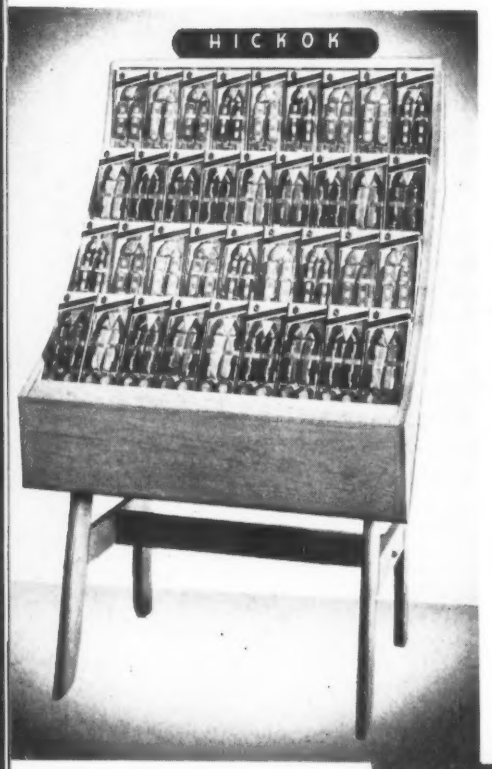
Five of the new Jewel-Tone Bantamlite pocket flashlights fit into pockets formed in this paperboard counter display. Back has compartment for extra stock. Gold serves as a dramatic background color for the black and white circle featuring a flash of the lighter. Display, Merritt Display Card Co., New York.

Helene Curtis' new single-package, die-cut display for the half-pound, family-sized jar of creme shampoo makes a neat point-of-sale piece measuring only $7\frac{1}{2}$ by $8\frac{3}{4}$ in. The display is yellow and white against a dark green background. Lithography, Excello Press, Inc., Chicago. Finishing, Rapid Mounting & Finishing Co., Chicago.

Hickok



NEW PACKAGES are designed to appeal to masculine tastes, with all-over tweed pattern and colored name bands. Color of bands indicates price of lines—maroon for the quality line, green for the de luxe line. Belt package is specifically designed for horizontal display, just as it appears when worn. The old belt carton was smaller and lacked quality character in its appearance.



FLOOR display of sun-tan oak is designed to take up a minimum amount of costly floor space. Similar unit for belts permits them to be tiered horizontally.

ACETATE laminated to the entire carton blank provides a cover for the end-opening cartons and protects the whole package from soil during handling. The item itself is anchored to inner platform by die-cut slots.

Over 10 years ago Hickok Mfg. Co., Rochester, N. Y., started something in men's furnishing stores by taking their leather belts off racks, where they hung like so many straps, and putting them in packages—thereby making them suitable gift items, encouraging brand selling and facilitating wider use of displays. Today a complete modernization of the Hickok packages for all of its men's and boys' accessories has given the line a new sales stimulus.

Perhaps it was because the founder of the company was a maker of fine jewelry that fine packaging has always been considered an important phase of merchandising the Hickok line. Even when the company made only belt buckles, the buckles were boxed. As the line grew, packages were designed so that they had re-use value. When the elder Hickok died in 1945, the Hickok name was known from coast to coast because of the 1,800 styles of packaged belts, buckles, suspenders, garters, wallets and men's jewelry.

The current package modernization program was started in 1947 by Ray Hickok, son of the founder and now president of the company. In that year Hickok jewelry appeared in a new plastic pigskin case. Under Mr. Hickok's personal direction the packaging program has now been completed. Goal of the redesign program was to make the packages "functional and modern without being of the novelty type," according to Mr. Hickok. He says that "there are 151 different steps to making a man's fine leather belt but the 152nd step, the one that takes a belt completely out of the ordinary, is packaging. This is the final touch."

Designed to appeal to masculine tastes, each of the new packages bears a family resemblance through a distinctive tweed pattern printed in russet brown on the end-opening folding cartons and set-up boxes.

Two printed bands of color placed diagonally across

modernizes

TWEED MOTIF IN VISIBILITY PACKAGES AND 58 NEW DISPLAY UNITS GIVE NEW EMPHASIS TO MEN'S ACCESSORIES LINE THAT WAS A PACKAGING PIONEER

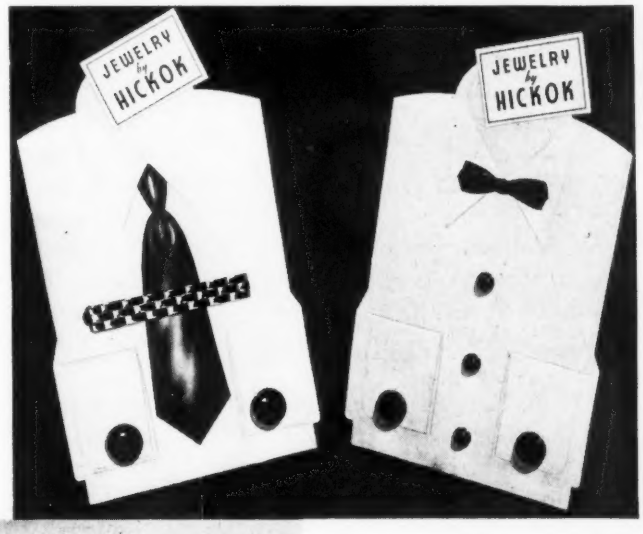
the face of the box to simulate ribbons carry the Hickok name and sell copy printed in reverse. The colors of these bands offer quick identification for the salesman as to the price of the merchandise—maroon for the regular quality line and green for the de luxe merchandise. A thin strip of the color is repeated around the sides with the name printed in the same shade at the ends. The only other decoration on the packages is a new Hickok trademark in the shape of a heraldic escutcheon. On some of the boxes the shield is printed in the color band; on others, in one corner or on the end.

Emphasis is given to visible packaging for the suspender, belt and garter items. Acetate sheeting is laminated to the entire carton blank over the printed surface and die-cut window of the face. This process gives the entire package the appearance of being overwrapped, yet retains the convenience features of a conventional window-type carton during packing. With the ends of the acetate-covered "window" die cut diagonally to carry out the sweep of the color bands bordering them, these are the outstanding packages of the line. Thus protected during handling, the item itself is anchored to inner platforms by die-cut slots.

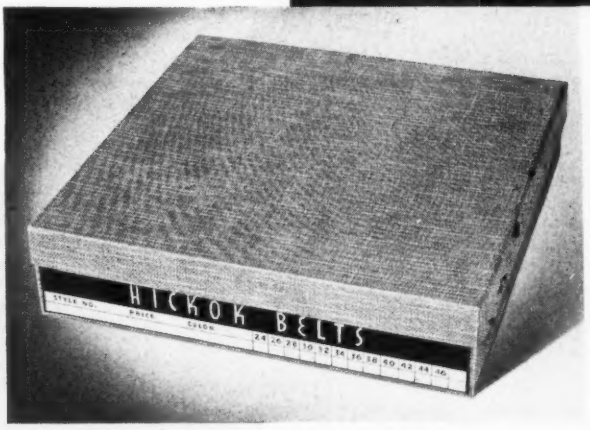
Proportions of the belt box ($9^1/_2$ by $1^5/_8$ in.) were specifically designed so that it can be displayed horizontally, with the belt appearing just as it would when worn. A paper sticker with the price and size printed in gold is attached to the belt horizontally just back of the buckle. An ingenious way of showing the price is the pull-up tab on the top end of the suspender carton. The die-cut tab is part of the end tuck flap and can be pulled up from the rest of the tuck for display purposes. On the other solid-faced cartons a white spot is left on one side for price, style and size.

New displays were designed, keeping in mind that retail studies have shown that per square foot of display space used, the cost of selling men's accessories is steadily rising.

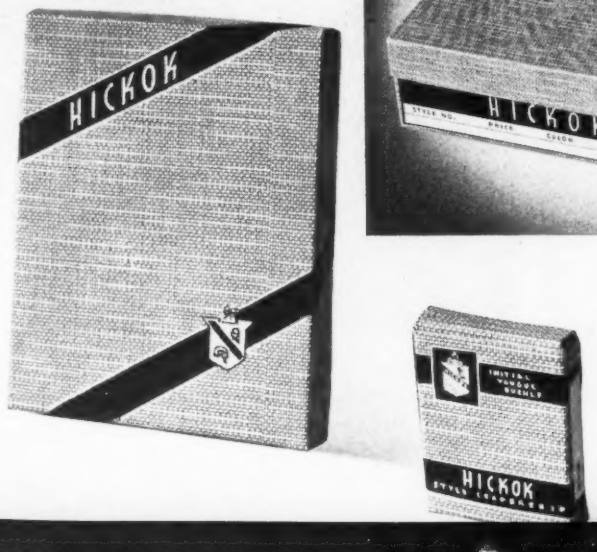
One new floor unit is a sloping easel of sun-tan oak



MINIATURE SHIRTS for counter displays are made of paperboard with actual jewelry items added by the dealer. Hickok has designed 58 new displays, 31 for jewelry items alone.



SHELF BOXES carry half dozens and dozens as standard units. Number of package sizes has been reduced to one standard size for belts, garters, suspenders.



PLACEMENT of new Hickok shield trademark in color bands emphasizes the quality of fine products. Note how the basic design is adapted for small belt buckle carton. Price, size and style information is placed on side panel.

in which 42 belt packages can be stacked in the horizontal position. A long top shelf offers specialty belt display possibilities. A display unit for the counter is made of marbleized plastic. It can be set upright on a counter top or laid flat in the show case. Holding six belts, it can be used, the company believes, in shirt, slack or hat departments to create impulse sales. For the jewelry items, miniature wingback easel paperboard "shirts" $7\frac{1}{2}$ in. high and $4\frac{1}{2}$ in. wide have been designed. Tie clasps, cuff links and studs can be fitted into the shirt, which comes complete with tie. Altogether Hickok has prepared 58 different new display units, 31 of which are for the jewelry items.

With the modernization of packages, simplification has also been achieved. There is now only one size of belt package, where formerly there were two. Suspenders also come in only one size and shape of package instead of two.

The Hickok packages for garters have been reduced from three to one. Even the shelf packages—the plain tweed pattern with name band at the end above the stock information label—are standardized into half-dozen and dozen sizes.

The restyled packages are scheduled to move into retail stores early this spring.

CREDITS: *Boxes, Arvey Corp., Chicago. Floor and counter displays, W. L. Stensgaard & Associates, Inc., Chicago. Jewelry shirt display, Frederick Strecker Co., Rochester, N. Y.*

Box that breaks for single-unit orders

One way of taking care of a single-unit sale when the original package contains two or more is suggested by this new patent-applied-for duplex break-apart package used for the Sport King brand fishing line marketed by Montgomery Ward & Co.

The standard pack has always been two 50-yd., connected spools per box. The company found, however, that 60% of its sales were mail orders calling for *one* 50-yd. spool. Since Montgomery Ward didn't want to abandon the two-spool pack, their problem was how to take care of the one-spool order without removing a spool from the regular pack, cutting the line and rewrapping, thus losing the value of the brand name in most instances because the original box was thrown away.

V. T. Penn, Montgomery Ward's fishing tackle buyer, and E. P. Hoyle and R. F. Jennings of the Cortland Line Co., Inc., Cortland, N. Y., who supplied the company with the fishing line, put their heads together and came up with the illustrated box.

Instead of the regular two-spool telescope box, three open-end paperboard sleeves are used. Each spool is encased in a small sleeve and then both of these are inserted into a larger sleeve, perforated in the middle. Identical labels are placed on each side of the perforation.

Now, when an order for a single spool comes in, all the shipping clerk has to do is this: Grasp the box firmly by the ends in both hands, bring it down smartly on a table edge or something similar so that the two sections break and then snip the connecting line. Each half becomes a complete, fully labeled package.

The new box has been enthusiastically received, according to reports made by R. F. Jennings, director of advertising and purchasing for the Cortland Line Co.

CREDIT: *Boxes, Central Paper Box Co., McGraw, N. Y.*

folding carton

by *Burt*

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TOOTH POWDER
TRADE MARK
DR. LYON'S
TOOTH POWDER
This preparation made originally by an experienced, practising dentist is intended solely to clean the teeth. The regular use of Dr. Lyon's Tooth Powder morning and night helps keep your teeth and gums clean.
CONTENTS 10 OZ.

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Allyl starch—a new material

HIGHLY COMPATIBLE RESIN THAT GIVES NEW BRILLIANCE AND PERMANENCE TO INKS, COATINGS AND FINISHES IS NOW AVAILABLE FOR PACKAGE TESTING. By M. H. Baker*

Developed in 1944 at the Eastern Regional Research Laboratory of the U. S. Department of Agriculture, allyl starch, a new resin whose roots are deep in the agricultural economy of the United States, has been available in semi-commercial quantities for the last year. Through its engineering and development program, General Mills Research Laboratories has pioneered in producing this new type resin on a pilot plant basis and has introduced it to the packaging industry.

Allyl starch is a cream-colored solid which is readily soluble in alcohols, ketones, esters, halogenated hydrocarbons, nitro-paraffins, high-flash naphthas, ethers and in aromatic hydrocarbons to which some hydrogen bond-forming solvent, such as isobutanol, has been added. Because of its solubilities and because it is compatible with many other resins, this new material has been evaluated by many industrial organizations engaged in paper coating, wood coating, in the manufacture of printing inks, varnishes, overprint varnishes and rubber preparations and in the production of specialty finishes. Generally, industrial users in the packaging field have found that allyl starch brings up the colors in lithographed impressions on paper or metal, sharpening and brightening the effect.

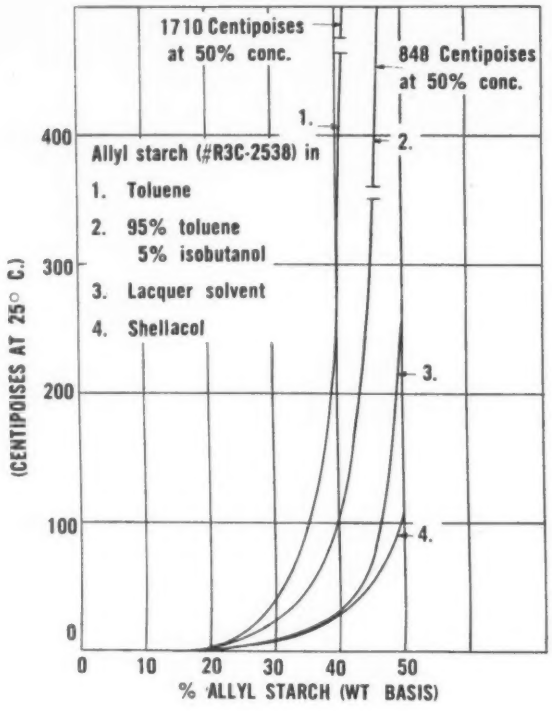
When allyl starch films—which dry very quickly—become cured, they form a hard, mar-resistant surface that has high gloss, is extremely solvent resistant and is resistant to acids and water. Because of these properties, allyl starch is now being considered for use as an overprint varnish on beer cans, as a coating for cap liners that are used on bottles containing acidic or solvent-bearing materials and as a protective gloss coat for soft-drink bottle crowns. Since allyl starch, when cured, is impervious to such compounds as oil of wintergreen, xylene, carbon tetrachloride, benzene, mineral oil and tincture of iodine, its place in the cap-liner coating field is apparent and readily established.

The mar resistance, high gloss and solvent resistance of allyl starch also give the product a promising future as a coating material for beer cans. One large can manufacturer reports extremely favorable results.

Printing inks, particularly aniline inks, have been made with allyl starch as the resin in the ink vehicle. Reports show that these inks are extremely quick

TRANSLUCENCY is imparted to paper when it is coated with allyl starch. Although this property of the material is as yet unexplored, it may prove of value to the packaging industry.

* Head of Field Application Section, New Products Commercial Research, General Mills Research Laboratories, Minneapolis, Minn.



VISCOSITIES of allyl starch solutions can be varied considerably according to solvent used.

drying and have high gloss. When used for printing on glassine or cellophane, they appear to have markedly superior adhesion to inks made with other resins widely used for the same specialized purpose.

In addition, 60% solutions of allyl starch are finding commercial application in the bonding of oily or greasy surfaces; this suggests, of course, that allyl starch may become useful as a labeling adhesive for cans or jars that contain oily or greasy materials, as a glue for butter and margarine packages and as a general adhesive for many types of containers for products of an oily or greasy nature.

Chemically, General Mills' allyl starch is an unsaturated ether of starch that contains approximately 1.7 allyl groups per glucose unit. It is prepared by reacting allyl chloride with a starch paste.

Usually described as an "oxidizable high polymer," it is highly unsaturated; consequently, it will react with oxygen to form an insoluble film. Because of its rather high molecular weight (10,000 to 50,000), its solutions dry rapidly through release of the solvent and it is these unique properties that give allyl starch a promising future not only in printing inks and overprint coatings, but also in laminating adhesives, paper impregnates, paper greaseproofing agents and in many coating applications outside of the packaging field.

Allyl starch is neutral in pH; tests indicate that it is apparently non-toxic. Once dissolved in a solvent, allyl starch solutions may be stored for indefinite periods without danger of gelation. A drier or accelerator may be added before use, to shorten cure time.

TABLE I—ALLYL STARCH SOLUBILITIES
(2.0 g. allyl starch and 20 cc. solvent)

Aromatic Hydrocarbons		
Benzene	Soluble	
Toluene	Soluble	with 0.2 cc. isobutanol
Xylene	Soluble	with 0.8 cc. isobutanol
Tetralin	Soluble	with 1.2 cc. isobutanol
Ennjay 100	Soluble	with 1.3 cc. isobutanol
Ennjay 150	Soluble	with 1.7 cc. isobutanol

Halogenated compounds—Soluble in all halogenated compounds except carbon tetrachloride, in which it is soluble after the addition of 0.6 cc. of isobutanol

Alcohols—Soluble in alcohols

Glycols—Soluble in dipropylene glycol. Other glycols, e.g., ethylene glycol, propylene glycol and diethylene glycol, require small amounts (10 to 35%) of a solvent such as butanol or butyl cellosolve, for good solubility

Ketones—Soluble in ketones

Esters—Soluble in most esters. Some esters require the addition of a small quantity of a solvent such as isobutanol or butyl cellosolve for good solubility

Insoluble in ethyl laurate, ethyl palmitate and vegetable oils.

Nitroparaffins—Soluble in nitroparaffins

Ethers—Soluble in most ethers with the exception of isopropyl ether and *n*-butyl ether. Soluble in ethyl ether after the addition of 4 cc. of isobutanol

Miscellaneous solvents—Allyl starch is soluble in butyl carbitol, diethyl carbitol, cellosolve, methyl cellosolve, diethyl cellosolve and carbitol acetate

Paint thinners—Insoluble in paint thinners, but solutions in good solvents will tolerate small amounts of aliphatic hydrocarbons. The distillation range of the latter should be lower than that of the good solvent in the solvent mixture

Although allyl starch is incompatible with drying oils and most cellulose derivatives (although it is compatible with nitrocellulose RS$^1/_2$ second, SS$^1/_2$ second and SS$^1/_4$ second), it is in general compatible with the Santicizers, the sulfonamides, phthalate and sebacate esters, phosphate esters, carbonate esters, some of the Paraplex resins and similar compounds (see Table II). In addition, it has a wide solubility range that makes it of particular interest to producers of packaging materials (see Table I).

The viscosity of an allyl starch solution depends to a large degree upon the type of solvent used. Viscosities are highest in aromatic hydrocarbon solvents and are lowest in solvents such as alcohols and ketones that are capable of entering into hydrogen bond formation. Thus, it is possible to alter viscosities of allyl starch solutions to a considerable degree simply by changing the solvent combination (see chart above).

Solvent	*% Solids*	*Viscosity at 25° C., Gardner-Holt*	*Density, 25° C.*
95% toluene-5% isobutanol	40	I–J	0.97
Shellacol	40	A1–A	0.93
Lacquer solvent*	40	F	0.97

* Composition (by weight) 130 toluene, 20 butyl cellosolve, 10 isobutanol, 10 Shellacol.

Like other polymerizable monomers, allyl starch has a tendency to shrink or contract upon polymerization.

TABLE II—COMPATIBILITY OF RESINS AND PLASTICIZING RESINS WITH ALLYL STARCH
(Basis 10 parts allyl starch to one part resin)

Resin	*Compatibility*	*Resin*	*Compatibility*
Bakelite BR 14634	C	Paraplex AL 111	I
Bakelite BR 254	C	Paraplex RG 2	I*
Limed rosin	C	Paraplex RG 7	C
Vinsol	C	Paraplex G 20	C
Abalyn	C	Duraplex ND 75	C
Pentacizer 81	C	Duraplex A 27	C
Pentacizer 131	C	No. 1323 Beckosol	
Glyptal 1202	I	E.L.	I*
Glyptal 1276	C	No. 24 Solid Beckosol	I
Esterol 4651	C	Arochlor 1242	C
Cumar resin V2	C	Arochlor 1260	C
Polyethylene glycol		Linseed oil, raw	I
600	C	Beeswax	I
Polyethylene glycol		Cellulose esters	I
300	C	Ethyl cellulose	I
Plastoflex #50	C	Nitrocellulose RS 1/2	
Vistac	I	sec.	C
Plastolein X348R	C	Chlorowax	I
Styron	I		

Key: C—Compatible; I—Incompatible.
* Film exhibits slight to moderate blush.
The addition of compatible resins, where greater flexibility, water resistance and adhesion of allyl starch films are desired, is recommended practice.
Several of the above resins exhibit inhibitory characteristics with respect to the ability of allyl starch films to cure. Care should be exercised not to use excessive quantities of such materials.

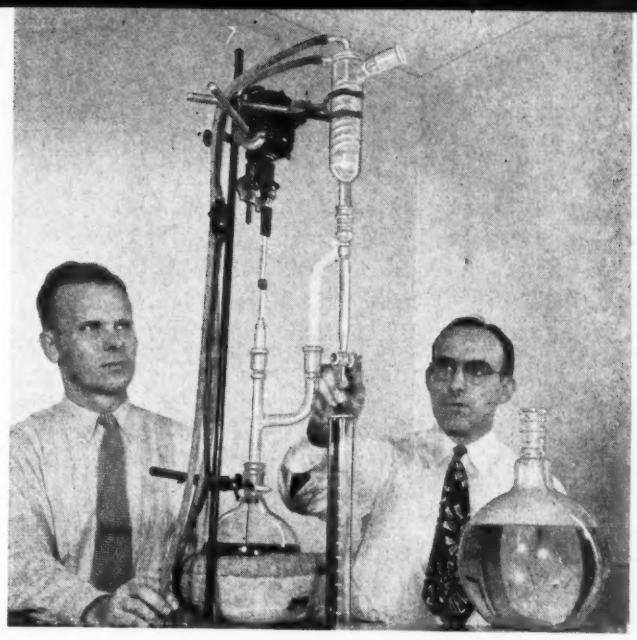
TABLE III—DRYING TIMES OF ALLYL STARCH SOLUTIONS
(In lacquer solvent)

Films were spread by a 0.003-in. doctor blade from solutions of 40% solids

Composition	*Surface*	*Set-to-touch*	*Dust free*	*Tack free to foil*
Allyl starch A. S. + 20% Santicizer 140	Bond paper	<5 min.	5 min.	8 min.
A. S. + 20% Santicizer 140	Bond paper	10 min.	42 min.	2.25 hrs.
A. S. + 20% Santicizer 140	Fir plywood	10 min.	48 min.	2.25 hrs.
A. S. + 20% Santicizer 140	Glass	14 min.	50 min.	2.25 hrs.
A. S. + 20% Paraplex RG-7	Bond paper	5 min.	7 min.	2.0 hrs.
A. S. + 20% Paraplex RG-7	Fir plywood	6 min.	7 min.	2.25 hrs.
A. S. + 20% Paraplex RG-7	Glass	5 min.	7 min.	2.0 hrs.

Since this process inevitably leads to strains in the film, with resultant checking or cracking, films must be plasticized with 10 to 20% of a plasticizer or plasticizing resin. This presents no problem, however, since allyl starch is compatible with so many plasticizers.

Allyl starch films can be cured at room temperature in the presence of 0.1% cobalt. However, optimum properties are obtained when the film is baked at 100 to 125 deg. C. without driers. When cured, allyl starch films, as noted previously, will be hard and mar resistant, have excellent gloss, will be resistant to organic solvents and have moderate water resistance. Pigments may be added to color allyl starch solutions and give other desirable properties to the cured film.



SAMPLES of allyl starch have been available to the packaging industry from General Mills Research Laboratories for the last year. A production pilot plant is now in operation. Here chemists prepare an allyl starch solution.

Although allyl starch is still an experimental material available only in semi-commercial quantities, research indicates that it will be priced competitively with the commonly used resins. Because of this indication and because of the product's unique properties, commercial use of the material is expanding. Today allyl starch is being evaluated as a general synthetic coating, as a shellac replacement, specialty lacquer and varnish for furniture, as a bronzing liquid vehicle and as an ingredient in textile finishes—as well as a thermosetting adhesive, a printing-ink base and a paper impregnant for packaging application. In addition, it has interesting, unexplored properties—for example, its ability to "transparentize" paper. When coated on a sheet of bond paper, it renders the sheet translucent, a fact which may indicate a possible new and unique use for allyl starch of ultimate benefit to the packaging industry. As these new applications are developed and present uses are expanded, production is being adjusted to meet the demand.

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WVP at 0° by hygrometric sweep-gas method

NEW APPARATUS USING SUPER-SENSITIVE ELECTRIC HYGROMETERS PERMITS HIGH-ACCURACY MEASUREMENT AT LOW TEMPERATURES

By W. A. Wink* and Leonard R. Dearth†

With the development and increased use of materials for the packaging of foods at low temperatures, the need for a suitable method for measuring the water-vapor permeability (WVP) of such materials has become urgent. The problems encountered and associated with the measurement of WVP at low temperatures have already been adequately discussed by Van den Akker (1),[1] Cherepow (2) and in Instrumentation Reports to APPA (3). It is evident, on the basis of these discussions, that the determination of WVP at low temperatures (zero deg. F. and below) is not necessarily accomplished with facility and reliability by the simple adaptation of a method which has been found to perform satisfactorily at normal room or elevated temperatures. An intrinsic difficulty in evaluating WVP at a low temperature is attributed to the fact that the vapor pressure differential across the specimen is greatly reduced (for the same relative humidity differential) when going from normal room temperatures to, say, zero deg. F. Consequently, large reductions in the permeability values are also observed. It is therefore essential that the method employed to evaluate reliably WVP at a low temperature must be capable of detecting an extremely small mass rate of transfer of water vapor.

In the consideration of a method for obtaining permeability data at low temperatures, it was believed that the hygrometric sweep-gas method described by Van den Akker (1) possessed the required sensitivity and warranted development. This method, it will be recalled, takes advantage of a small but sensitive electric hygrometer for detecting the small quantities of moisture that would permeate a specimen having a good moisture-resistant barrier. The good sensitivity of the method is attributed to the fact that the mass of moisture permeating the specimen is evaluated in terms of its hygrometric effect. The significance of utilizing the hygrometric principle for the measurement of WVP is more fully appreciated when it is realized that at zero deg. F. only 1 microgram of moisture is required to change the relative humidity of 100 ml. of air by 1%. Since the recently developed electric hygrometers are capable of detecting changes in relative humidity of the order of a few hundredths of 1%, it is apparent that fractional parts of a microgram of moisture are easily detected.

* Technical Associate and †Technical Assistant, The Institute of Paper Chemistry, Appleton, Wis. Adapted from a paper delivered at the Annual Meeting of the Technical Assn. of the Pulp and Paper Industry, New York, Feb. 24, 1949, and published in the May issue of *Tappi*.

[1] Numbers in parentheses identify "References" appended.

Principle of the method

The principle of the hygrometric sweep-gas method is illustrated in Fig. 1. A specimen S is placed between two chambers in a test cell so that the opposite sides are exposed to different relative humidities. The space below the specimen is conditioned to a high relative humidity with a saturated salt solution and that above the specimen is swept with air conditioned to a low relative humidity. As moisture from the lower chamber passes through the specimen and enters the upper chamber, the relative humidity of the air passing over the specimen is increased. This increase in the relative humidity is determined by means of the electric hygrometer H by obtaining the difference in the relative humidities of the air entering and leaving the space above the specimen. The volume rate of flow of the air is adjusted so that the relative humidity of the air leaving the upper chamber is maintained in a narrow range which is slightly above that of the incoming air. (A relative humidity differential of approximately 3% was employed to obtain the data presented in this paper.) Once the volume rate of flow and the difference in the relative humidities of the air entering and leaving the upper chamber have been accurately determined, the water-vapor permeability (WVP) of the specimen is calculated in accordance with the following equation:

$$\mathrm{WVP} = K\,(r_2 - r_1)\,\rho\,Q,$$

where K is a known constant, r_2 is the relative humidity of the air leaving the space over the specimen, r_1 is the relative humidity of the air entering the space over the specimen, ρ is the density of saturated water vapor at the temperature at which the permeability measurement is made and Q is the volume rate of flow of the air over the specimen.

The air which is conditioned to the low relative humidity is obtained from a compressed air line and enters the conditioning system at the point C. In order to provide a means for regulating the flow of air over the specimen, the air line is equipped with a pressure-reducing valve D which is adjusted to control the pressure at about 1 or 2 p.s.i., a needle valve E

which is used as a manual control for adjusting the flow to approximately the desired value and a manometer type of regulator F which serves as an additional means for ensuring a constant rate of flow. The regulator F simply consists of two long glass tubes (about 30 in.) having different diameters. The outer tube is filled with water to within a few inches of the top and the inner tube is arranged so that it can be raised or lowered in the water to any desired depth. To adjust the regulators for a given flow of air, the inner tube of the regulator F is set at an appropriate depth and the needle valve is then adjusted so that a small amount of air is caused to bubble out continuously at the lower end of the tube. The end of the tube is constricted somewhat to cause the air to leave in a stream of small bubbles.

The air leaving the regulators passes through a brass cylinder G (about 2 in. in diameter) and a coil of copper tubing K (0.5 in. in diameter and approximately 20 ft. long) where it is cooled to the temperature of the bath A (this bath is controlled at the desired dewpoint temperature) and saturated with water vapor. The cylinder G is only partially immersed in the bath A and serves as a dehydrator, removing most of the excess moisture from the air before it enters the coil K. This method of removing the moisture is preferred to the use of drying tubes filled with a desiccant; the latter require considerably more attention and may possibly over-dry the air before it enters the coil K. As the air flows through the coil of copper tubing L ($^1/_4$ in. in diameter and about 5 ft. long) which is immersed in the bath B (this bath is controlled at the temperature desired for the permeability measurement), it is warmed to the temperature of the bath and enters the space above the specimen. The air entering this space has the partial pressure of water vapor in equilibrium with ice at the temperature of bath A and a relative humidity which, for this work, is given by the ratio of the vapor pressures over ice corresponding to the respective bath temperatures.

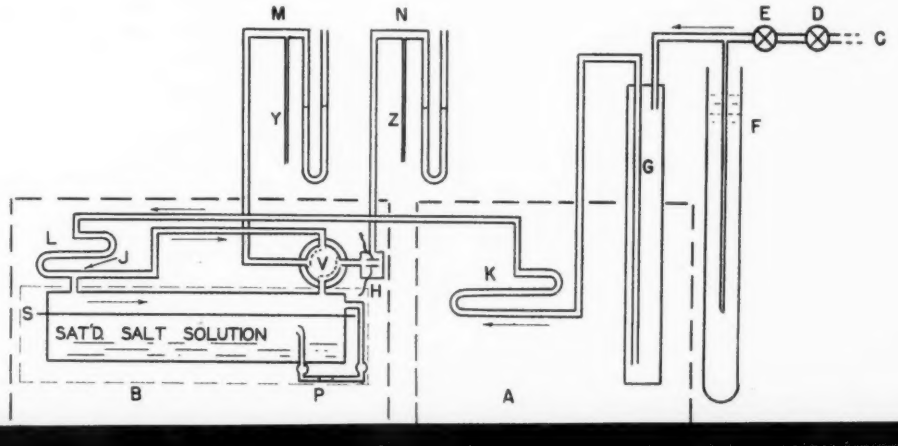
The stream of air conditioned to a low relative humidity divides equally at the point J so that half of the stream passes over the specimen and the other half flows directly to a four-way valve V. This valve is constructed in such a way that a 90-deg. turn of the handle will direct the flow of air either from the upper branch from the point J, or from the space above the specimen, into the small chamber containing the electric hygrometer H. This valve arrangement provides a means for periodically checking the relative humidity of the incoming air without interfering with the flow of air passing over the specimen. When the valve is turned in the position indicated in the diagram, the air leaving the space above the specimen, of relative humidity r_2, is directed past the electric hygrometer. When the valve is turned through an angle of 90 deg., air of relative humidity r_1 flows past the hygrometer and an accurate measurement of the difference in the relative humidities is thereby easily obtained.

The rate of flow of air through the two paths from the point J is measured with two calibrated flowmeters M and N of the capillary-manometer type. In order to obtain the required sensitivity, these manometers are filled with oil (Amoil S) to which a small quantity of an oil-soluble dye has been added. The small capillaries Y and Z, through which the air exhausts into the atmosphere of the room, are and must be matched insofar as their resistance is concerned. By establishing conditions so that the resistance of the two paths of air beyond the point J are essentially the same, the valve V can be turned to either position without disturbing the rate of flow over the specimen. Furthermore, the pressures in the two lines are then also equal, which facilitates calibration of the hygrometer under conditions simulating those employed for the permeability measurements.

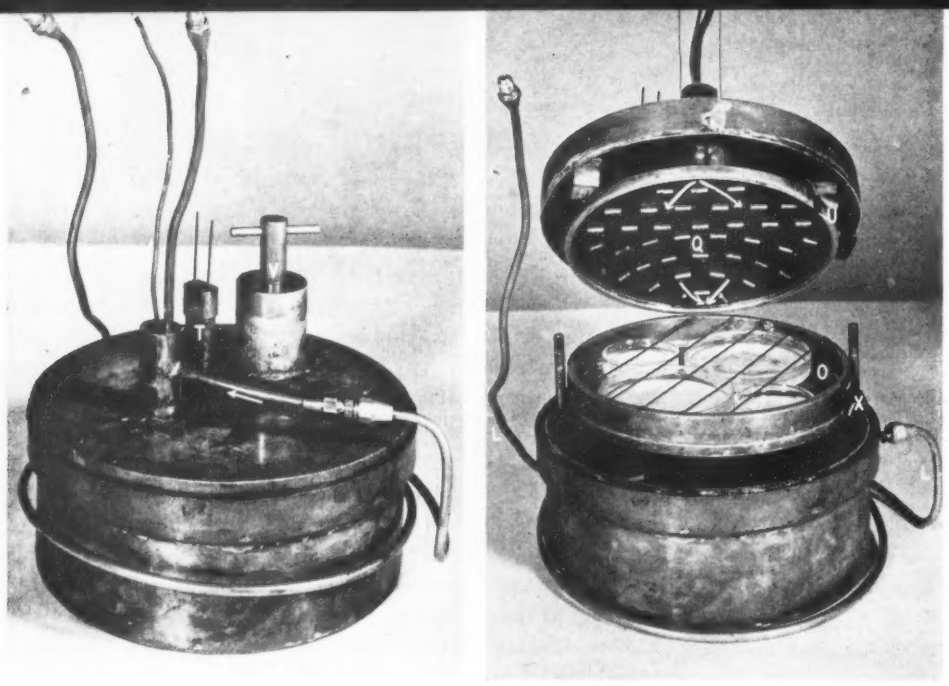
A small pressure equalizer P is utilized to avoid subjecting the specimens to a pressure differential whenever the temperature of the test cell is changed or whenever a change in the rate of flow is made. The equalizer consists of a small piece of glass tubing into which two small bulbs have been blown in the vertical sections that connect to the upper and lower chambers. The glass tube contains a small drop of silicone oil, which permits the pressures to equalize and yet prevents the transfer of water vapor from the lower to the upper chamber.

Description of the equipment

Photographs of the permeability test cell are presented in Figs. 2 and 3. The view of the assembled cell (Fig. 2), as it appears prior to immersion in bath



1. A SCHEMATIC SKETCH of apparatus for the hygrometric sweep-gas method. As moisture from the lower chamber of saturated salt-solution cell passes through the test specimen S, the relative humidity of the air being swept above the specimen is increased, and this increase is measured by the electric hygrometer H. Complete description of the method, keyed to this diagram, appears in the accompanying article under the heading of "Principle of the Method."



2 and 3. PHOTOGRAPHS of assembled (left) and disassembled (right) test cell. Assembled test cell shows four-way valve V, mounting for electric hygrometer T, coil L and the inlet and outlet tubes. The disassembled cell, as it appears when changing a specimen, shows four Petri dishes for saturated salt solution. Explanatory notes appear in the article under "Description of the Equipment."

B, shows the location of the four-way valve V, the mounting for the electric hygrometer T, the coil L and the two outlet tubes which connect to the calibrated flowmeters M and N (Fig. 1). The outer container which serves as a means for preventing the bath liquid from coming in contact with the edge of the specimen is constructed of heavy-gauge copper.

Fig. 3 shows the various components of the test cell as it appears when disassembled for changing a specimen. The lower chamber O contains four Petri dishes for holding the saturated salt solution. The inside diameter of the chamber is 8 in. and thus allows the testing of a specimen having an area of about 50 sq. in. The five small rods anchored to the edge of the chamber serve as supports for the specimen.

The upper chamber Q, through which the air conditioned at the low relative humidity passes, is equipped with a number of baffles. These baffllles consist of short rods ($^1/_2$ in. long) having a diameter which is slightly less than the depth of the chamber ($^3/_{16}$ in.). The inner surface of the chamber is lightly coated with a microcrystalline wax which serves as a means for holding the baffles in place and also reduces the moisture adsorptive capacity of the chamber. The arrangement used for the baffllles was determined by experiment in order to obtain a uniform distribution of the air passing over the surface of the specimen. In studying the air-flow patterns through the chamber, a moisture-sensitive dye was distributed over the surface of the chamber and sealed from the surrounding atmosphere with a glass plate. Moist air was then passed into the chamber at various and known rates of flow and the patterns assumed by the colored dye were observed. A number of trials, using various baffle combinations, were made to find the most satisfactory arrangement.

The tubes U and X are connected to the upper and lower chambers, respectively. The pressure equalizer (not shown) is connected to these tubes after the specimen has been inserted.

The test specimen is sealed to the outer edge of the two chambers with a grease and the chambers are held together with a sturdy yoke-type clamp. The upper and lower bars which form a part of this clamp make contact with the center of each chamber through a small steel ball so that the clamping load is uniformly distributed.

The outer container, with the flanged edge at the top, prevents the bath liquid from contacting the edge of the specimen. The narrow groove formed by the flange is partially filled with mercury, which seals the cover to the lower container.

A detailed diagram of the mounting for the electric hygrometer is presented in Fig. 4. This mounting consists simply of a brass plug T which serves as the support for the small hygrometer H and the electrical leads W. The leads are small brass rods ($^1/_{16}$ in. in diameter) which are insulated with glass tubing R. Before mounting the hygrometer, the assembly (consisting of the brass plug and the electrical leads) is immersed in molten wax to vapor seal the holes through which the leads are brought. Finally, the leads and the glass tubing are securely anchored at the top with a hard sealing wax. The spring contactors anchored at the end of each lead hold the hygrometer in place and establish the electrical contact. The details for constructing the small glass hygrometer are presented in the paper by Van den Akker (1) and in reports to the American Paper and Pulp Assn. (3).

A description of the cryostats and of their controls is in an American Paper and Pulp Assn. report (3).

Procedure

The procedure for evaluating the WVP of a sheet material at zero deg. F. with the two sides of the specimen exposed to relative humidities of 96% and 22%,

TABLE I—WVP DATA OBTAINED WITH HYGROMETRIC SWEEP-GAS METHOD
(At zero deg. F.)

Sample	*R.H. difference,* $(r_2 - r_1)$	*Rate of air flow,* *ml./min.*	*WVP,* *g./(sq. m. × 24 hr.)*
1	0.026	10.	0.011
1	0.037	21.	0.033
2	0.020	3.0	0.0025*
2	0.013	3.5	0.0019†
3	0.035	8.0	0.012
3	0.024	4.6	0.0046
4	0.051	110.	0.24
4	0.051	107.	0.23
5	0.026	33.	0.036
5	0.028	27.	0.032
5	0.023	21.	0.020

* Evaluated with the kraft paper exposed to the low R.H.
† Evaluated with the cellophane exposed to the low R.H.

DESCRIPTION OF SAMPLES

Sample 1—300 MSAT-83 cellophane.
Sample 2—300 cellophane laminated with 14 lb. of wax to 33 lb. special wet-strength kraft, 65 lb. finished.
Sample 3—Two 25-lb. bleached glassine sheets laminated with approximately 7 lb. of amorphous wax.
Sample 4—140FF Pliofilm.
Sample 5—24-lb. opaque sulphite sheet laminated with 12 to 15 lb. of wax to 17 lb. supercalendered sulphite sheet with 3 to 4 lb. of wax on one side and 2 to 3 lb. of wax on the other side of the laminated sheet.

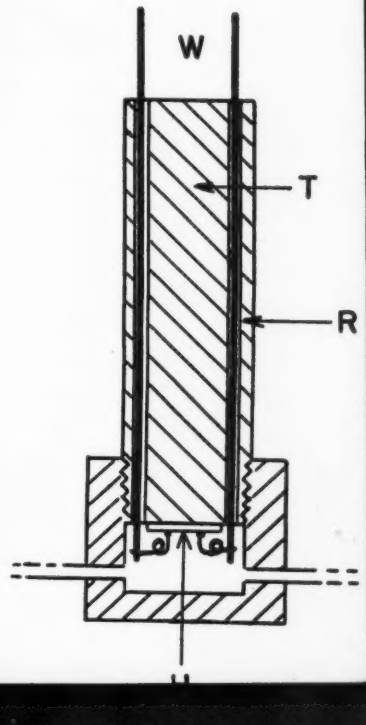
respectively, is as follows: The test cell is disassembled as shown in Fig. 3. A saturated salt solution (NaCl) having an equilibrium relative humidity of 96%, together with an excess of the salt, is poured into the Petri dishes to a depth just sufficient to cover the bottom of each dish. A thin film of Celvacene (Distillation Products, Inc.) is evenly applied to the edges of the upper and lower chambers and a specimen previously cut to a diameter of roughly 8.5 in. is placed and centered over the lower chamber. The upper chamber is then placed over the specimen and clamped in place. The pressure equalizer is attached and the assembled cell is then placed in the outer container. The coil connection for the incoming air is made as shown in Fig. 2. The cryostats A and B are adjusted to maintain constant temperatures of minus 28.5 deg. F. and zero deg. F., respectively.

Before placing the test assembly in bath B (zero deg. F.), the coils L and K are connected and the space above the specimen is flushed with dry air obtained from coil K. (When the air from this coil is raised to normal room temperature, its relative humidity is extremely low.) This is done to eliminate the danger of condensing and freezing moisture in the air lines and the test assembly when they are placed in the bath. The flow of air must be maintained while immersing the assembly. To ensure adequate circulation and a uniform temperature of the liquid surrounding the test assembly, the assembly is placed on an open support about 2 in. above the bottom of the tank; the liquid level is adjusted so that the top of the assembly is immersed to a depth of approximately 2 in. The connections to the flowmeters are made and the rate of flow of air is initially adjusted at an arbitrary value of about 50 cc. per minute.

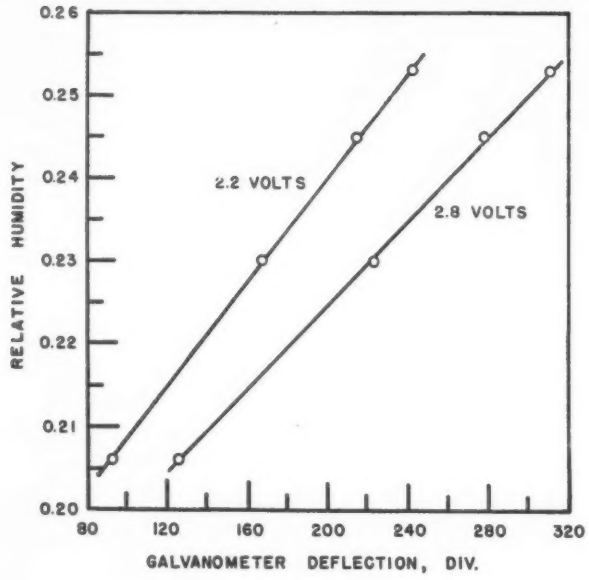
While the assembly is equilibrating to the temperature of the bath, the four-way valve V is turned to the position for determination of the initial relative humidity. After the test assembly has reached the temperature of the bath and the relative humidity as indicated by the galvanometer readings is constant (this is an indication that the cell has reached the temperature of the bath), the four-way valve is turned to direct the air from above the specimen through the chamber containing the electric hygrometer. Following a time interval of 1 or 2 hr., the galvanometer is read to determine the relative humidity of the air leaving the space above the specimen. If the observed relative humidity is beyond a small range above the relative humidity of the air entering the specimen chamber (for example, beyond 22 to 25% relative humidity when the air entering the space above the specimen is at about 20%), an adjustment of the rate of flow is made. In order to maintain comparable testing conditions, the flow of air is adjusted so that the difference in relative humidities $(r_2 - r_1)$ is held within relatively narrow limits. These adjustments are not time consuming, nor are the conditions difficult to achieve.

Subsequent to the preliminary adjustments, humidity measurements are made at suitable time intervals until equilibrium conditions have been established and the rate of moisture transfer through the specimen is constant. The selection of appropriate time intervals for the humidity measurements is governed by the permeability of the specimen and the moisture-absorptive capacities of the surfaces and materials exposed to the low relative humidity. It should be emphasized that a constant rate of moisture permeation for various kinds of materials may vary anywhere between a few hours and several weeks or longer.

When the rate of transfer of moisture through the specimen has reached a constant value, the difference in relative humidity between the air entering and leaving the space above the specimen will be constant for a given rate of flow. At equilibrium, the rate of



4. DIAGRAM of mounting for the electric hygrometer. The leads are 1/16 in. brass rods insulated with glass tubing.



5. CALIBRATION CURVES for small electric hygrometer at zero deg. Sensitivity at low temperature is exceptionally good. Curves are linear.

flow and the difference in relative humidity are noted and recorded for the purpose of calculating the permeability on a standardized basis. If the rate of flow Q is given in ml./min. and the difference in relative humidity as a decimal (for example, $r_2 - r_1 = 0.230 - 0.200 = 0.030$), then the WVP in g./ (sq. m. × 24 hr.) as obtained with this equipment is given by the equation,

$$\text{WVP} = 0.042\ (r_2 - r_1)\ Q.$$

Calibration of the electric hygrometer

The calibration of the electric hygrometer is accomplished with the same equipment that is employed for the permeability measurements. The permeability test cell is assembled as shown in Fig. 2 and the valve V is turned to measure the initial permeability. In this case, as in the case of the permeability measurements, dry air from the coil K is flushed through the assembly, prior to immersion in the bath. The test assembly is placed in bath B and the rate of flow of air passing over the hygrometer is adjusted at an arbitrary value ranging anywhere between 50 and 100 ml./min. Bath A is subsequently adjusted at the temperature corresponding to the relative humidity desired for the first point of a calibration curve. After equilibrium has been attained (as indicated by a constant galvanometer reading), the galvanometer reading and the corresponding relative humidity are recorded. The relative humidity is calculated on the basis of the vapor pressures corresponding to the two bath temperatures as described earlier in this paper. In order to obtain three or four calibration points, the temperature of the bath A is merely controlled at the corresponding values.

Typical calibration curves as obtained for an electric hygrometer in the foregoing manner are presented in Fig. 5. These curves are for the same hygrometer and were obtained at two different voltages. The points of interest to which attention is drawn are: (1) that the sensitivity of the hygrometer at a low temperature is exceptionally good, being in the order of 0.00032 R.H. per galvanometer scale division at 2.2 volts and about 0.00025 per galvanometer scale division at 2.8 volts and (2) that, for the small humidity range of interest, the curves are linear; this is a desirable, although not necessary, attribute.

A further point of interest regarding the hygrometer is its relatively good stability. During the course of a year, the calibration of an electric hygrometer which had been alternately exposed to widely different temperatures (normal room temperature and zero deg. F.) changed very little; the order of magnitude of the change was about 0.04 R.H. at a given galvanometer reading. These small gradual changes in the calibration of the hygrometer do not create a serious difficulty insofar as the permeability measurement is concerned. Whenever a change in the calibration occurs, the entire calibration curve through the linear portion is merely displaced, for most practical purposes, parallel to itself. For example, if the initial calibration curve obtained for an electric hygrometer were the one labeled 2.8 volts (Fig. 5), the changes in calibration caused by aging of the element would shift the curve toward the one labeled 2.2 volts. Thus it will be seen that, once a complete calibration curve has been obtained, it is generally sufficient to check a single point and simply construct a new calibration curve through the newly determined point. In constructing this curve, some allowance should be made for the fact that the slope of the curve changes somewhat.

When the differences in the relative humidities are determined in the permeability measurements, a frequent check of the calibration of the hygrometer is easily obtained. Since the relative humidity of the air entering the space above the test specimen is fixed and known by the two bath temperatures, it is merely necessary to note r_1 whenever a check on the calibration is deemed advisable. If any small changes are noted, a new calibration curve is constructed as described above.

Results

The permeability data obtained with the hygrometric sweep-gas method on the five samples of moisture-resistant materials included in the TAPPI round robin testing program are presented in Table I. The second column presents the difference in relative humidity of the air entering and leaving the space above the specimen, the third the rate of flow of air over the specimen in ml./min. and the fourth the WVP in g./ (sq. m. × 24 hr.). These values, it should be recalled, are for testing conditions in which one side of the specimen was exposed to a relative humidity of 96% and the other to a relative humidity of about 22%; the latter is the mean value for the air entering and leaving the space over the specimen.

In evaluating the permeability of these samples, it was found, as expected, that the time required to establish equilibrium conditions (*Continued on page 188*)

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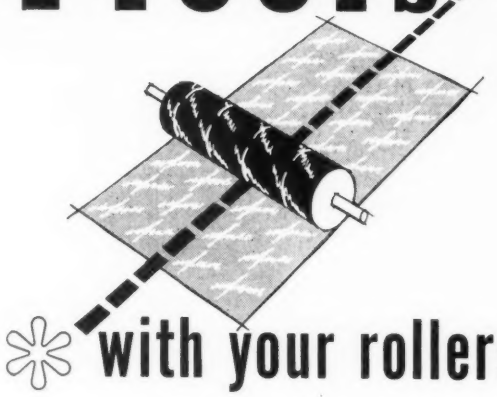

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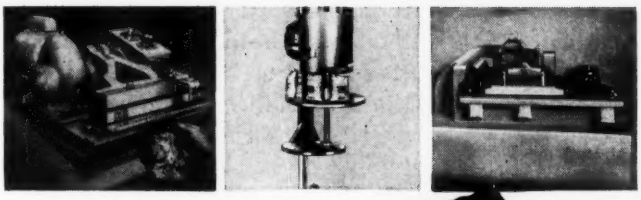

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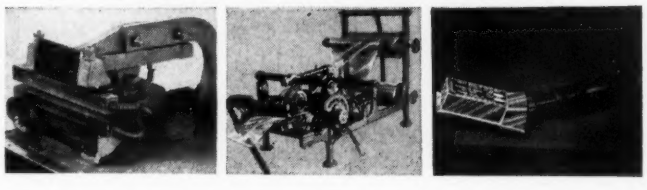

Questions and Answers

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Protective pack for automotive engine

QUESTION: We are interested in your suggestions on how to pack our automobile engines for shipment across the country in wooden crates. One of the hazards is dust and another is dampness in transit and storage. We are now spraying the motors with a light anti-corrosive oil, but this does not solve our problems.

ANSWER: One answer to your problem would be to obtain large multi-ply bags which can be slipped over the engine before it is put into the crate. Such a bag should have a cellophane or glassine liner or an inner ply with a greaseproof coating. The bag should have an asphalt-kraft paper combination as one of its plies. The motor mounts can be slipped through openings in the bag with the bag tied around them or perhaps the hold-down bolts can be punched through the bag. Another possible method would be to use a heat-sealing, moistureproof, waterproof and highly flexible barrier. If this type of protection is used, there would be no need to coat the motor with oil, but silica gel or some other desiccant should be put into the bag before final closing. This is called "Method II" packaging, which was so successful in the overseas shipment and storage of war material. Either of the methods suggested should be entirely satisfactory for your use.

Applying wax coatings to cartons

QUESTION: We are interested in the application of waxed cartons for the packaging of biscuits and wafers. Can you tell us the best and simplest method of covering folding cartons with microcrystalline wax? We hesitate between a dipping tank, an enrober or a spray application.

ANSWER: There is equipment available for the dipping of folding cartons in various kinds of waxes or wax mixtures. It is also possible to use enrobers and spray processes, but there are certain problems with this type of equipment which would not be recommended for your use unless you are interested in large-scale, completely automatic operations. For small-scale operations the simplest method would be a properly designed melting tank; that is, one with suitable temperature control and low temperature heat source. The auxiliary equipment would consist of racks or other means of holding the carton and some means for thoroughly chilling the wax before overwrapping, etc. As an alternative means, you could use a carton overwrap of heavily waxed paper, either a single wrap, or, if necessary, a double wrap with the exterior surface printed before waxing. Such a wrapper could be closed by heat sealing it tightly around the package and could be made to give similar functions to the wax-dipped package.

Testing wrappers for frozen foods

QUESTION: We are developing a wrapping material for frozen foods and we would like to know how to test its protective qualities. Are there any standards or quick tests we can make to be sure our wrapper has proper qualities for this use?

ANSWER: After you have developed several combinations of materials which can be satisfactorily produced on your equipment and processes, it is necessary that they be evaluated at the temperature for storage and handling of frozen foods, zero deg. F.

There is no way that anyone can judge or test the flexibility, water-vapor permeability, heat-seal strength and other necessary qualities of materials at zero deg. F. except by actual tests at that temperature. In other words, tests which are run at 100 deg. F. or room temperature do not necessarily have any correlation with the values measured at zero deg. F.

After you have evaluated your new materials at zero, then it is possible to work out correlations between the test at zero and the elevated temperature, so that you can use the evaluated temperature tests as a rapid means of checking quality and function.

You should also establish standards for your new materials by the weight and continuity of the coating and any other components. Checks against these standards can provide an index of certain types of performance. However, it is suggested that occasionally checks of performance be made at zero deg. F. to be sure that the proper correlation is always being maintained.

It is also desirable that occasional package tests be made at zero, since the final index of performance is the finished package.

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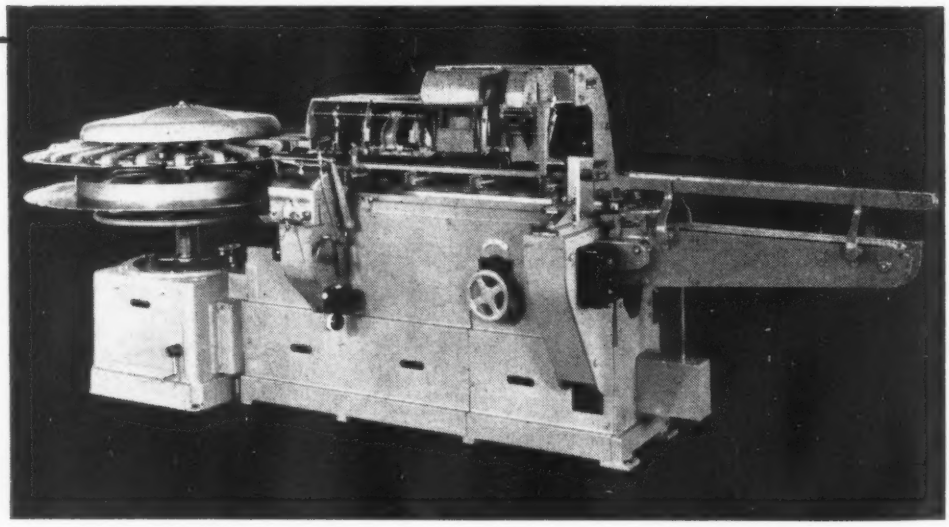

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If you are packaging in paper bags, write for information on SEALTITE.

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BUFFALO 13 . N.Y.

Homes in small packages!

WHY not reflect the beauty and utility of America's new homes in the packaging of beautiful hardware? Why not, indeed, for more and more manufacturers of the half billion dollars home hardware industry are doing just that. Last year 300 million *set-up boxes* were used in this field to give new impetus to the sale of door knockers, hinge and knob sets, chimes, tools and the hundreds of over-the-counter hardware items.

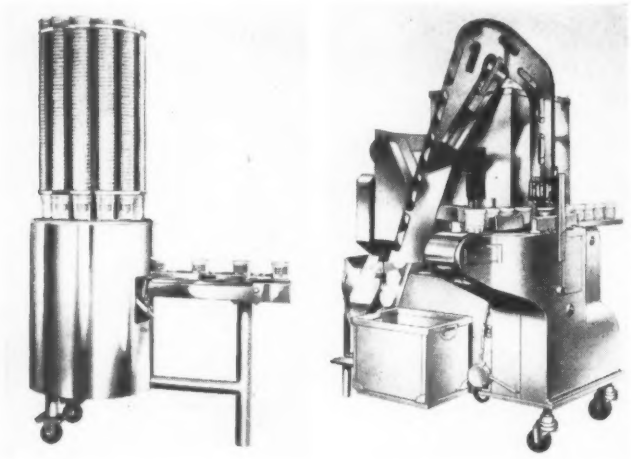
Your product, too, may find the versatile advantages of *set-up boxes* a boon to your business. Investigate today — ask your nearest set-up box manufacturer for his advice.

NATIONAL PAPER BOX MANUFACTURERS
Association
AND COOPERATING SUPPLIERS
Liberty Trust Building • Philadelphia, Penn.

Equipment and Materials

AUTOMATIC DISPENSER AND UNSCRAMBLER

Two new machines have been developed by the Sealright Co., Inc., Fulton, N. Y., for the automatic dispensing, spotting for filling and covering of its ice cream and cottage cheese containers. The "AND" dispenser (left) feeds containers from stacks, one at a time, up to speeds of 55 per min. It has



a device that stops the dispensing at a certain point if the filler has failed, thereby preventing jams. The "ANC" covering machine (right) unscrambles masses of covers, puts these and filled containers in proper position and covers them.

PRODUCT SETTLING TABLE

Stuyvesant Engineering Co., Lyndhurst, N. J., is marketing a product settling table attachment to use with its filling machine. The product is delivered from the discharge spout into the secondary spout, mounted on the table, which vibrates it into the container. Degree of vibration is controlled by turning a graduated dial in the front of the table. Rattling or surface damage of the containers is prevented by felt cemented to the deck and track rails of the table. The attachment is especially suited to narrow-necked containers.

SPECIAL-OCCASION STOCK BAKERY LABELS

A new group of special-occasion stock end labels for bakery products is offered by Marathon Corp., Menasha, Wis., as an inexpensive way for bakers to build community good will. The package, "Sweet Sixteen," contains 16 different designs suitable for use around holidays, during fund-raising campaigns, etc. Labels will seal to wax paper, cellophane and glassine-base wrappers.

PNEUMATICALLY OPERATED VIBRATOR

The Cleveland Vibrator Co. has announced a "SA" series of pneumatically operated vibrators which feature low air consumption, minimum number of parts, instant starting with full power. They are recommended for such applications as vibrating tables used in product packaging or moving granular materials through chutes and tubes. Available in seven sizes with five different mounting arrangements, the vibrators range in over-all dimensions from $5^3/_8$ by $^7/_8$ by $1^1/_2$ in. to 8 by $1^3/_4$ by $2^1/_4$ in. Air consumption of the sizes is from 5 to $8^1/_2$ cu. ft. per min. on 80-lb. pressure per sq. in. and with this pressure, speeds of operation range from 5,100 to 1,950 vibrations per minute.

STRESS-STRAIN TESTING MACHINE

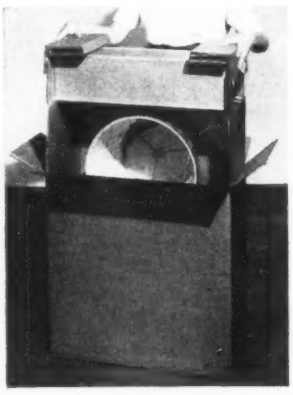
The National Forge & Ordnance Co., Irvine, Pa., is introducing a new stress-strain testing machine of 5,000-lb. capacity for determining the strength of containers. The specimen is placed on the lower platen; the upper moving platen then positions the container and is forced down upon it by motor-driven rotating screws The upper platen operates at 6 in. per min. in positioning and $^1/_2$ in. per min. in testing The stress-strain reading is clearly visible on the large dial and there is also a pen-recorder that plots a five-magnification stress-stain diagram on a 8 by 10-in. chart.

PORTABLE, SEMI-AUTOMATIC BOTTLE FILLER

Gus J. Schaffner Co., Pittsburgh, announces a portable, semi-automatic bottle filler named "Little Doc" 102. Designed for small bottling plants or as mobile auxiliary equipment for a large installation, the filler is said to be capable of handling 1,360 pints per hour, depending on viscosity and foaming character of the liquid and skill of operator.

TABLE LAMP SHIPPING CONTAINER

The Hinde & Dauch Paper Co., Sandusky, Ohio, has developed a new corrugated packing carton for table-lamp bases and shades in sizes to accommodate all standard table lamps. The base is packed in a regular slotted box, over the ends of which are placed corrugated shock pads. The shade is suspended by a simple spread-type metal clip from the center of a large corrugated liner. Complete packs can be shipped to the user flat. The box is said to save greatly on packing time, taking only about 2 min. per lamp.



POLYETHYLENE-FOIL LAMINATE

Polyethylene laminated to foil has been added to the line of packaging materials made by The Floyd A. Holes Co., Bedford, Ohio. This Polyfoil laminate can be heat sealed and is recommended for packaging foods, drugs and chemicals. The plastic film on the foil is said to increase tear resistance and block the passage of water vapor through pinholes and openings resulting from folds and machine handling. It has no odor, is non-toxic and retains its flexibility at minus 85

Select the carton type you prefer...

a JONES CARTONER will load it!

Jones Cartoners are outstanding in their ability to load folding cartons of every type. Day after day, Jones Cartoners are loading millions of cartons — *reverse tuck; airplane; straight tuck; spot, single* or *double glue* — for nationally famous manufacturers in every field.

Regardless of carton type, you do not need special, expensive carton construction. Jones' patented mechanisms for opening, loading, and closing the carton, compensate for normal carton variations. Slight imperfections in scoring or die cutting, gluing, etc., will not cause production stoppages.

With Jones Cartoner versatility, your Sales Department is not limited in selecting carton design, and your Production Department achieves better cartoning, faster, at lower cost. Investigate Jones Cartoning, today. Why not submit your requirements for a comprehensive recommendation?

Remember, ONLY THE *Finest* CARTONER CAN GIVE YOU THE *Lowest* CARTONING COST!

R. A. JONES & COMPANY, INC.

P. O. Box 1295 CINCINNATI, OHIO

THE MAJORITY OF AMERICA'S CARTONED PRODUCTS ARE JONES CARTONED

Mullen Test

Recognized the world over as standard bursting test

Motor-Driven Model C Mullen Tester

Tests materials not exceeding .025" in thickness and a bursting strength of 200 pounds. Gauge capacities 30, 60, 100, 120, 160 and 200 pounds per square inch. Note two gauge-mounting by use of manifold for testing materials of widely different strengths.

The Mullen Tester operates on the hydraulic principle—bursting strengths are determined irrespective of any other factor. Conforms to ASTM and TAPPI standards.

Send for booklet describing complete line of Perkins Testers.

B. F. PERKINS & SON, Inc.

Engineers and Manufacturers

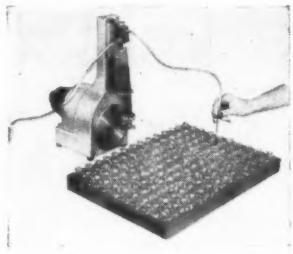
Holyoke, Massachusetts

Equipment and Materials (Continued)

deg. F., according to the company. It is supplied in sheets up to 50 in. wide in a range of thicknesses.

AMPULE FILLING MACHINE

A new multi-purpose light-weight ampule filling machine for liquids has been developed by PerfeKtum Products Co., New York. The machine, Ampfil Model F-100, fills vials with capacities up to 50 cc. Using the tray method, it is reported 2,000 containers an hour can be filled. The company has also introduced a sealing apparatus, Labseal, for sealing ampules and other laboratory glassware. The crossfire burner is designed so that adjustments of height, inclination and distance between burner tips may be made. Flame types and heat are also adjustable.

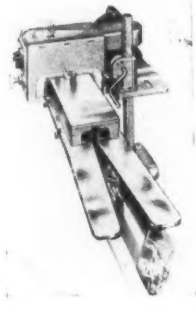


LOW-TEMPERATURE WAXES

A new type of microcrystalline wax said to retain flexibility at 15 deg. F. during laboratory tests has been developed by Socony-Vacuum Oil Co., Inc. Designated as "S/V Magnowaxes," the new line of waxes was designed especially for paper and paper-converting industries because the low temperature flexibility makes them useful in applications such as frozen food packages and locker papers. The waxes are available in amber and brown.

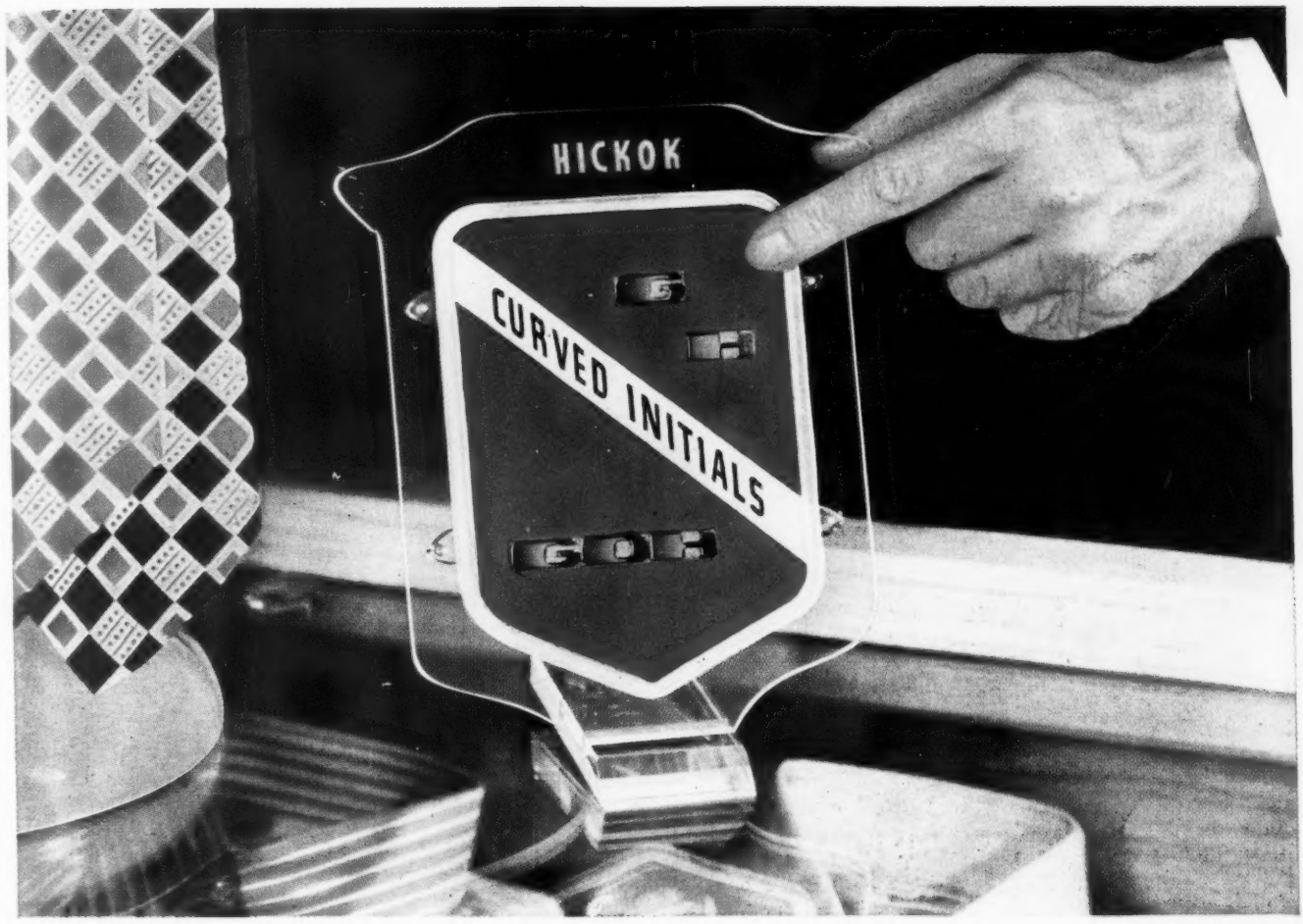
AUTOMATIC HEAT-SEALER FOR BAGS

Pack-Rite Machines, Milwaukee, Wis., is introducing a new rotary-type bag heat-sealing machine, known as the Auto-Feed Speedsealer, which is entirely automatic. Bags are dropped from a filling machine onto a traveling conveyor-chain infeed to the sealer. The chain guide grips the bag tops together as they travel along a gradually tapered feed wing until front and back surfaces of the bag tops meet upon entering the preheater area. Chains are so arranged that they can make a foldover if desired before taking the bags through the heat-sealing rolls. The sealer operates at speeds up to 860 in. per min. or with variable speed drive to match existing conveyor equipment. Bags having a well-defined leading edge and straight-edge bottoms are best adapted for the sealer, it is said.



HARD-RUBBER FILTER

The Ertel Engineering Corp., Kingston, N. Y., offers a new hard-rubber filter to be used where there is a tendency of a liquid product to be spoiled by metallic pick-up, or where the liquids will attack metals. The filter, Model EUR, is available in sizes from a 10-disk model having 2,350 sq. in. of filtering surface to a 100-disk model having 23,500 sq. in. of filtering surface. Filtration capacities, based on viscosity of water



STAGE SETTING *for sales!*

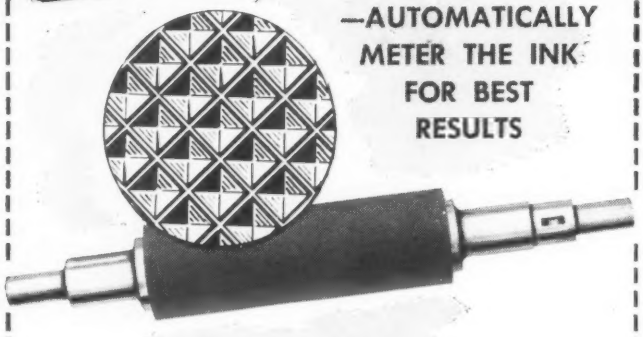
First attract the eye—then build the urge to buy. That is the sales logic behind the selection of BEHRLON flock-coated background for these compelling counter displays by Hickok. The glowing color commands attention, and the soft richness of the BEHRLON fibers sets off the brilliance and attractive design of the Hickok cuff links and tie clasp.

Top-flight products call for the luxurious quality of BEHRLON new rayon flock in displays and packaging. Precision-cut in 1/16" and 1/32" fibers, in twenty-four attractive colors, BEHRLON is applied to any surface with spray guns or other mechanical means. Also TUFKOTE BEHRLON (in ten colors), is the choice where extra resistance to marring is required.

To discover how BEHRLON coatings could improve the presentation of your product, send us samples upon which our engineers will apply BEHRLON micro-cut fibers in the colors of your choice. Write us today for your BEHRLON Brochure with Color Chart.

BEHR-MANNING·TROY, N. Y.

EVENFLO
ANILINE PRINTING ROLLS



—AUTOMATICALLY METER THE INK FOR BEST RESULTS

EVENFLO eliminates ink waste, poor quality runs and rejects due to improper inking...saves money on every job.

The new Evenflo engraved ink-metering rolls make tedious, time consuming adjustments unnecessary. Ink is fed in the exact quantity necessary for fine presswork, continuously and automatically. No ink is wasted, no press time lost, less printing stock is spoiled due to irregular inking. Evenflo is the one sure way to better printing and reduced costs.

★ ★ ★

PRESS BUILDERS—Improve your aniline presses by installing Evenflo metering rolls as original equipment. Prices will be sent on receipt of your blueprints or sketches.

QUICK DELIVERY ON *ALL TYPES* OF ANILINE ROLLS

Plate, impression or special aniline rolls can be supplied promptly on order. Ask for an estimate on any or all the rolls in your press. Quotations will be furnished without obligating you in any way.

EVENFLO HAND PROOFER
—the handy way to test color and coverage

No need to set up a machine for testing ink. Quick as a wink, Evenflo Hand Proofer produces an *exact* sample. Keep these time and money savers on hand in your plant. Interchangeable Evenflo rollers make it possible to test with a roll that matches the one in your press or test for presses equipped with other than Evenflo rollers.

EVENFLO *PRODUCT OF*
PAPER MACHINERY and RESEARCH, Inc.
1014 OAK STREET, ROSELLE, NEW JERSEY

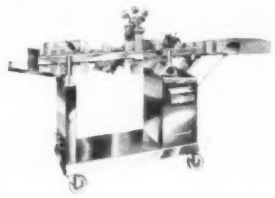
Builders and designers of paper converting machinery, aniline printing equipment, tension devices and custom mechanical specialties.

Equipment and Materials
(Continued)

and filter-sheet density, range from 5 to 50 g.p.m. The company's filter paper or asbestos filter sheets may be used.

ICE CREAM PACKAGER

A smaller automatic ice cream packaging machine, designed to meet the requirements of medium-sized plants, has been introduced by Anderson Bros. Mfg. Co., Rockford, Ill. The new model 175 has a capacity up to 40 pints per min. for No. 2 Philadelphia style ice cream containers.

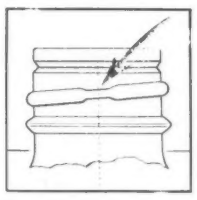


TWO-WAY REGISTRATION CONTROL

For use on packaging and cut-off machinery, where control of a web either forward or backward is necessary, Industrial Electronics Co., Inc., Hanover, Mass., is offering a two-way register control. It consists of a two-way amplifier with dual thyratron circuit and heavy-duty scanning head; custom-built selector switch and ball-bearing differential unit with correction motor.

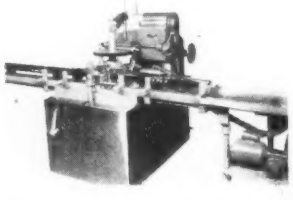
NEW B CONTAINER FINISH

The complete line of Duraglas prescription ware made by Owens-Illinois Glass Co., Toledo, Ohio, now includes the "depressed thread finish" feature which, it is said, enables the closure to be applied tightly without danger of rough seam edges scraping particles of the closure into the bottles. The company reports that this feature will soon be added to pharmaceutical, proprietary, toiletry, cosmetic, household and chemical containers. Sketch shows thread depressed at mold seams.



FILLER-LABELER FOR BOTTLED LIQUIDS

The Biner-Siegrist Machinery Mfg. Co., Los Angeles, is now manufacturing a combination filler-labeler for bottled liquids, particularly wines and spirits. Completely automatic, the Fil-Label Master, handles up to 60 bottles a minute. Any sized bottle from pints to gallons can be filled, according to the company. The machine has vacuum-filling tubes, compressed-air label press, uniform label placement and uniform filling level. Set-up includes unscrambler, accumulating table and necessary conveyor lengths. All working parts are chrome plated.



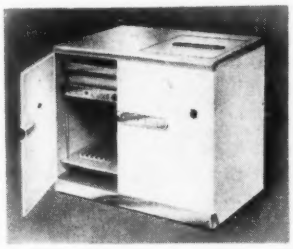
PRESSURE-SENSITIVE, WATERPROOF TAPE

For heavy-duty packaging of metal pipes, conduits, rods, rolls, sheets, coils, fittings, tubing, window frames, doors, trim, raw lumber, wall board, panels, plywood sheets, etc., Minnesota Mining & Mfg. Co., St. Paul, Minn., is introducing a new No. 880 pressure-sensitive, waterproof tape with an

acetate-film backing. Caliper of the tape is 7 to 9 mils, as compared to the 13 to 15 mils for the paper-backed tape introduced earlier this year. Both tapes have a tensile strength of 180 lbs. per in. of width and a tear resistance greater than 1,600 gram-centimeters measured on the Elmendorf tester.

DRY-ICE CUBES FOR CARRY-HOME PACKAGES

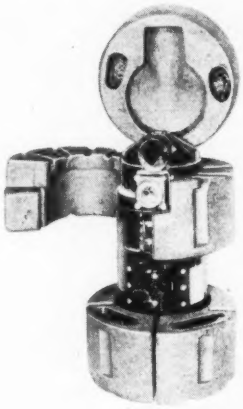
To keep frozen food or ice cream packages cold while a customer takes them home, the packages are usually packed with dry ice. Packagers of such products will be interested, thus, in a new combination storage cabinet, cuber and cutter for dry ice made by the Jiffy Mfg. Co., Hillside, N. J. The machine, suitable for installation in a retail store has insulated space for 2½ blocks of dry ice and cutting devices that reduce the blocks into cubes 2½ in. square and 1 in. thick.



MOLDED WOOD PULP FOR PROTECTIVE PACKAGING

Pulp Reproduction Co., Milwaukee, Wis., is now offering molded wood pulp for use as protective packaging during shipment.

For large quantity orders the company has facilities for molding the pulp to fit shapes other than square or rectangular and also a line of standard corner pieces of molded wood pulp for use as shock cushions when products are being packed either in crates or in boxes.

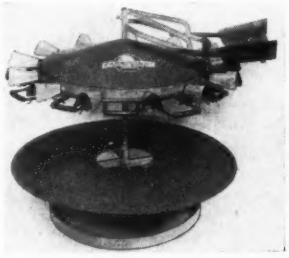


POLYETHYLENE BAGS AVAILABLE

Everett Sales & Equipment Corp., New York, announces the production of polyethylene bags suitable for packaging frozen and fresh fruits, vegetables, meats and seafood.

ROTARY BAG FILLER

An improved rotary bagging machine for potatoes, onions, oranges, apples, etc., has been introduced by the Paramount Mfg. Co., Stockton, Calif. Named "Whirl-i-gig," (Model CZ 12), the unit has 12 sack-holders for handling cloth, burlap or mesh bags in 10-, 15- and 25-lb. sizes. With special accessories the machine can also fill paper bags. Filling is done on two bags at one time and speeds up to 700 bags an hour, depending on size of the bag, are reported.



GIVE YOUR PRODUCT
Shatterproof PROTECTION
with LUSTEROID Vials and Tubes

Customers appreciate products packaged in Lusteroid. They know that these products are *safe* from accidental roughness in handling because Lusteroid will not break.

It's worth looking into Lusteroid for product protection *and* distinctive packaging. There's economy in handling, labeling, packing and shipping. All colors of the rainbow—clear or opaque. Sizes from ¼" to 1¼" in diameter and lengths up to 6" with cork, slip-on or screw-cap closures.

Write for descriptive bulletin.

LUSTEROID CONTAINER COMPANY, INC.
10 Parker Avenue, West
Maplewood, New Jersey

Plants and People

Roe Clark, chairman of the executive committee and treasurer of **Package Machinery Co.,** Springfield, Mass., will leave on May 14th for England, France, Switzerland and Italy to study manufacturing methods and procedure in the machinery-making field and to evaluate sales potentials of the European market.

Roe Clark

The business of **Delamere & Williams, Ltd.,** of West Toronto, Ontario, was purchased by **Delamere & Williams Co., Ltd.,** a wholly owned subsidiary of **Pneumatic Scale Corp., Ltd.,** of Quincy, Mass. This Canadian plant will continue to be under the supervision of **Victor G. Williams** as president and general manager. **Kendall D. Doble,** president of Pneumatic Scale, will serve as chairman of the board of the new Canadian subsidiary.

Walter L. Hardy has been made Eastern division sales manager of the **Floyd A. Holes Co.,** Bedford, Ohio. His headquarters will be in New York City.

The Standard-Knapp Corp., Portland, Conn., and the **Plax Corp.,** Hartford, Conn., both of which are operating divisions of **Hartford-Empire Co.,** have combined their Chicago offices at 221 N. LaSalle St.

The Borden Co.'s compulsory retirement rule put **A. F. Stevenson** on the pension list as of March 31, 1949. Mr. Stevenson has, however, opened his own office as consulting food technologist at 240 Lotte Rd., Ridgewood, N. J.

The **M. S. Dowd Carton Co.** plant at Groton, Conn., recently acquired by **Robert Gair Co., Inc.,** has been moved to and consolidated with the Connecticut Cartons division of Gair, at Montville, Conn. Production will be under the direction of **C. S. Huestis,** division manager, and folding carton sales under **Thomas E. Cathcart, Jr.**

The Triangle Package Machinery Co., manufacturers of Elec-Tri-Pak weighers and other packaging machinery for weighing, filling, measuring and sealing dry products, have moved into their new plant at 6633-6655 W. Diversey Ave., Chicago.

Palm, Fechteler & Co., New York, decalcomania manufacturers, announce the appointment of **Ralph W. Sterling** as assistant to the president and director of sales. **Don W. Armstrong** has been named Chicago representative.

The Edward Ermold Co., New York, manufacturer of labeling machinery, announces the appointment of **E. King Graves** as sales manager.

The opening of an Eastern sales office at 55 W. 42nd St., New York, in charge of **C. A. Wetli,** vice president and sales manager, has been announced by **Hudson Sharp Machine Co.** of Green Bay, Wis.

Stein, Hall & Co., Inc., New York, has appointed **Frank W. Perry** as manager of its Charlotte office.

Owens-Illinois Glass Co., Toledo, Ohio, has announced the appointment of **John D. Northup** as general manager of Corrugated Package Operations and **Harry J. Durholt** as general manager of the Libbey Division. Mr. Durholt succeeds **Frank T. Nesbitt,** vice president, who has been transferred to the company's administrative staff. **Robert C. Schwyn** replaces Mr. Durholt as the Libbey Division plant manager.

Arthur B. Meredith has been elected chairman of the board of **Meredith, Simmons & Co., Ltd.,** Canadian subsidiary of **National Starch Products, Inc.** Other officers include **Frank Greenwall,** president; **Ronald M. L. Francis,** executive vice president and general manager; **Ernest Hofmann,** vice president in charge of operations at Montreal. **Berkley V. Schaub,** present New York sales manager, becomes Toronto sales manager, and **Lester Klempner** is now sales manager of the New York division.

The Victor Industries Corp., makers of collapsible tubes, with plants in Brooklyn, Newport, Ark., and Chico, Calif., have completed a modern Filling Division in Chico, Calif.

Colt's Mfg. Co., Hartford, Conn., has announced the following administrative changes: **B. Franklin Conner,** formerly executive vice president, was made president to succeed **Graham H. Anthony,** now chairman of the board. **Richard S. Havourd,** previously secretary of the company, was appointed vice president and secretary.

The Chase Bag Co., Chicago, announces the transfer of **R. H. Ayers** from the Detroit sales office to manager of the company's Toledo branch.

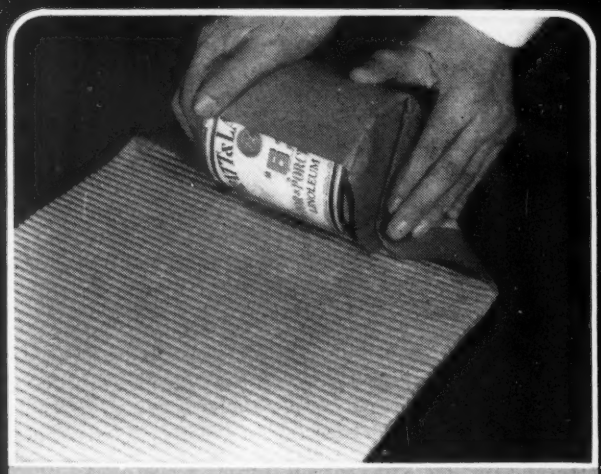
Following the recent purchase of the **Arthur Colton Co.** by **Snyder Tool & Engineering Co.,** Detroit, **Clarence Snyder,** chairman of the board of the Snyder Co., made the following announcement of Colton Co. officers: **Clarence Snyder,** chairman of the board and vice president; **Howard N. Maynard,** president and treasurer; **K. B. Hollidge,** executive vice president and secretary; **Harvey W. Purdy,** assistant secretary; **Samuel D. Harrison,** assistant treasurer; **Alfred W. Kath,** director of engineering; **Nelson Carman,** director of sales.

K. B. Hollidge

Economic Machinery Co., Worcester, Mass., has appointed **Louis L. Keeler,** packaging machinery specialist, Landsdowne, Pa., as its representative in Philadelphia and Eastern Pennsylvania.

E. B. Howard, sales manager of the **B-F-D Division** of **Diamond Match Co.,** announced the organization of a staff of experts in New York to assist customers in developing efficient pre-packaging techniques. This division manufactures Foodtainer molded pulp trays.

Ketchpel Engineering Co., West Engelwood, N. J., estab-



Improve Your Packages with
FLEXPAK*
H & D CORRUGATED Wrapping Paper

If a product is worth wrapping, it deserves FLEXPAK*, a flexible corrugated "wrapping paper" that hugs the product and cushions it on all sides to protect it from shock, abrasion, puncture, corrosion, dirt and grit. Used just like wrapping paper, FLEXPAK* reduces breakage, saves packaging costs, conserves materials, cuts packing time. Your package is smaller, neater, lighter. Ask for a sample.

*REG. U. S. PAT. OFF.

REG. U. S. PAT. OFF.

H&D BOXES

FOR MORE INFORMATION, WRITE

HINDE & DAUCH

Authority on Packaging

Executive Offices: 4905 Decatur St., Sandusky, Ohio

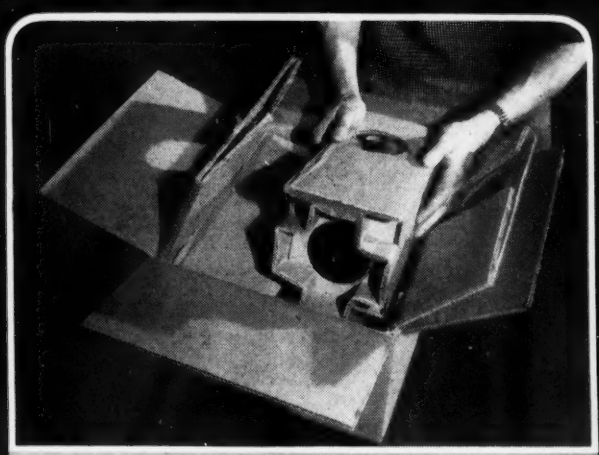
FACTORIES IN:

Baltimore 13, Md. • Buffalo 6, N. Y. • Chatham, Ontario
Chicago 32, Illinois • Cleveland 2, Ohio • Detroit 27, Mich. • Gloucester, N. J. • Hoboken, N. J. • Kansas City 19, Kansas • Lenoir, N. C. • Montreal, Quebec
Richmond 12, Va. • St. Louis 15, Mo. • Sandusky, Ohio
Toronto, Ontario • Watertown, Mass.

Designed for Protection . . . and SALES!

CLEVER MERCHANDISING
. Intelligent Packaging

A novel idea, such as the promotion of this "Father's Box," catches popular fancy with the help of good packaging. This H & D box is an example of good package design and colorful printing. It protects the merchandise in transit and displays it as an attractive gift. Give your product the advantages of planned packaging and watch sales climb!



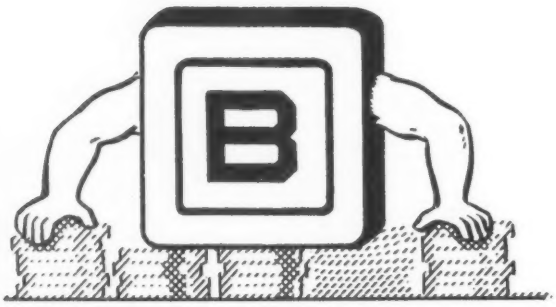
CONCENTRATED WEIGHT
. . Shipped Safely in Corrugated

This electric motor, small as it is, requires more than casual packaging attention. It must have a super-strength box, especially designed to accommodate the uneven contour of the housing. H & D package engineers worked out this low-cost, easy-to-pack, two-piece unit, adding interior packing to give complete protection against all shipping hazards. Let H & D solve your packaging problem!

With Wax You're Sure

Half-hearted PACKAGING SENDS *Costs* SKYWARD!

BARECO *Microcrystalline* WAX



HOLDS 'EM DOWN

Any half-done job costs you money. This is particularly true in the packaging and processing fields where contamination robs producers of thousands of dollars every year. A good box or package is often not enough . . . that is why you owe it to yourself and your product to test the fine protective qualities of Bareco Microcrystalline Waxes . . . for many years the leader in the field of Package Protection.

- HIGH WATER VAPOR RESISTANCE
- HIGH MELTING POINTS
- EXCELLENT HEAT SEALING CHARACTERISTICS
- CHEMICALLY INERT
- EXCELLENT ELECTRICAL CHARACTERISTICS

Samples Available in BLACK, WHITE AND AMBER

BARECO OIL COMPANY

Dept. P — Box 2009 TULSA, OKLAHOMA
Dept. P — Widener Bldg. PHILADELPHIA, PA.

Plants and People (Continued)

lished the following sales representatives: New York Metropolitan area, **Roto Bag Machine Co.,** New York; New England States, **Austin Industries,** Sudbury, Mass.; West Coast, **Peter D. Bowley & Associates,** San Francisco.

The Packaging Machinery Co., Springfield, Mass., announce the following personnel changes: **William H. Keil** of the Springfield office has been transferred to the Chicago office, working with **C. Robert Strehlau; Edward Buck** has been added to the Springfield staff and will cover Western New England and New York; **Edward A. Wagner,** formerly of the Chicago office, will establish an agency in Dallas and will handle the Package Machinery Co. line in Texas, Oklahoma, Arkansas and Western Louisiana.

Horix Mfg. Co., Pittsburgh, has announced the appointment of **L. Gale Huggins** as vice president and general manager. Mr. Huggins will report to **Mrs. Frank B. Fairbanks,** president of the company.

L. G. Huggins

Continental Can Co. has started construction of a new giant plant at West Mifflin Borough, Pittsburgh, for the manufacture of metal containers and crown caps for food, beer, oil and other industrial products. Soon to get under way is construction of a new plant at Milwaukee, Wis., for beer cans, food containers and crown caps.

J. Sydney Snelham, vice president and comptroller of Continental, has been elected a director of The Vulcan Detinning Co., Sewaren, N. J.

Roto Bag Machine Corp. of New York has appointed **National Paper & Type Co.,** also of New York, as its export representative for Latin America.

The Minnesota Mining & Mfg. Co., St. Paul, Minn., announces production at the former Plancor plant No. 80 at Bristol, Pa., began March 7. **Robert N. Wolfe** is manager.

James L. Coffield and **Robert S. Stephens** announce the formation of **Coffield-Stephens Associates,** with offices at 7720 Sheridan Road, Chicago. The new organization will provide product design and packaging service for industrial users throughout Chicago and the Middle West and represent the Mueller Can & Tube Co., Sun Tube Corp., Brad-

A CORRECTION—A make-up error in our March issue caused the omission of the last two lines of an item concerning representation of the **Knapp Mfg. Co.,** Los Angeles, and gave an erroneous meaning to the item. **King & Anderson,** San Francisco, have been appointed exclusive representatives of Knapp for Northern California, Oregon, Washington, Idaho, Montana and Nevada only. Knapp Mfg. Co., which manufactures wrapping machines and allied products, continues to be represented in other sections by **Jordan Sales Co., R. P. Anderson & Co., P. E. Odendahl & Co., Bunn Packaging Machinery, Wrap-Ade Machine Co., Edwin F. Deline** and **Moul & Collins.**

the "feel appeal"

Why do people like to touch a kitten's ear . . . a velvet gown . . . a baby's cheek? It's the "feel appeal" that counts. Velvetone Velour papers give to your product an appeal to the fifth sense. They will add the "touch of luxury" which transforms a plain box into a desirable package, a simple container into a padded jewel case. Velvetone Velour can be furnished from stock in a full range of 25 fashion-right colors—both in rayon and cotton finish.

If your design calls for fabric, use Norhide; our suede-like cloth.

Write for samples and information today!

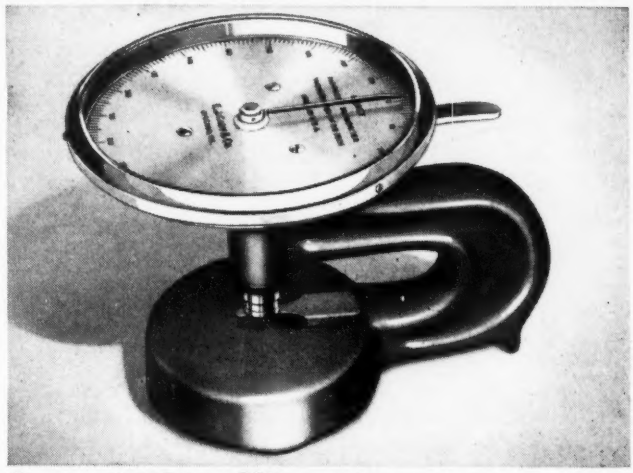
FLOCK PROCESS CO., INC.

NORWALK, CONN.

VELVETONE VELOUR

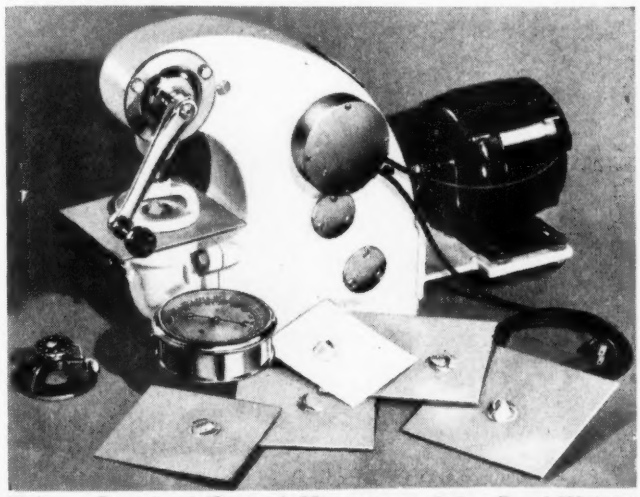
NORHIDE

CADY EXACT TESTING INSTRUMENTS FOR TESTING PACKAGING MATERIALS



Corrugated Liner Micrometer for thickness caliper. Finger on base inserts between flutes to give accurate thickness measure. Can be used on sheet stock, or after box is fabricated; thus, completed container can be kept for record; Specifications same as Micrometers shown below. Write for prices and specific data. Mention flute desired.

Cady Bursting Strength Tester for "Cady" or Mullen test. Electric motor actuates Uniform 12 second cycle; rupture is visible thru opening in special clamp designed to prevent creeping; gauge registers bursting pressure in lbs. P.S.I. Meets CCC specifications; used throughout the world for boxboards, papers, fabrics, materials requiring a uniform pressure burst test.



Below: Standard (Spring) Micrometer-left: Dead Weight (gravity) Micrometer-right . . . for accurate thickness caliper on sheet stock; papers, boards, foils,plastics, felt, glass, metal, etc. Dials are glass covered, 6" diameter, calibrated 1"1000ths or half-thousandths of an inch. Can be carried to job or used as desk models. Both are Precision instruments, yet they can be used with extreme accuracy by inexperienced operators. Write for prices, and data on all CadyTest Instruments including Basis Weight Scales for papers and tissues.

E. J. CADY & COMPANY, 134 N. LA SALLE ST., CHICAGO 2, ILL.

LABELS = SEALS
WRAPS = TAGS
LABELS = SEALS
WRAPS = TAGS
LABELS = SEALS
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DIE AND LABEL COMPANY

Creative Designers-Printers
Quality Packagings for 24 Years
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The primary service aim of Eastern Can Co. is to prevent the occurrence of packaging problems and complications which may cause our customers troublesome delays. To this end, Eastern performs a variety of research functions and certifies that all deliveries will be made promptly. Visit our sample show room before you purchase.

EASTERN CAN COMPANY, INC.

Keap Street, Wythe & Kent Avenue, Brooklyn 11, N. Y.

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Controlled

NET WEIGHING

Model B scale filler with FL gravity flow feeder for fast accurate net weighing of free flowing products. Beans, rice popcorn, coffee, grass seed, barley, salt and similiar materials. The model B with PFK specified for non free flowing items.

The double spout discharge hopper permits handling hard to open cellophane bags at speeds up to 45 or more 1 lb. bags per minute. Rated 4 ozs. to 3 lbs. with tolerence of 1/16 oz. to perfect.

Ask for our catalog No. 48 for this machine and many others operating in milligrams to 100 lbs.

WEIGH RIGHT Packaging Machinery

WEIGH RIGHT AUTOMATIC SCALE COMPANY

JOLIET • ILLINOIS • U. S. A.

Plants and People
(Continued)

ford-Kennedy Lumber Co., Yardley Plastics Co., Sobenite, Inc., and Eclipse Mfg. Co.

Acme Steel Co., Chicago, has appointed **W. S. Huss** as sales manager of the Southern Division, Atlanta, Ga.

Lachman-Novasel Paper Corp. of New York, specialists in fine box and specialty papers, have announced the appointment of **Olga Leonard** as packaging consultant.

A three-day instruction course for operations of the **Package Machinery Co.'s** Model FF and FA wrapping machines was given last month by **Ed Minneman,** Pacific Northwest representative of **Fred Todt Co.,** in the Gresham Berry Growers' plant, Gresham, Ore. The course consisted of one day of theory and two days in the disassembling and reassembling of a machine. It was the first course of its kind given in the Northwest and was designed to improve efficiency and thereby reduce packaging costs.

The A. H. Ross Co., Inc., manufacturer of automatic and semi-automatic cartoners, has changed its name to **Rockwell Packaging Machines, Inc.** It continues as a subsidiary of the **Rockwell Mfg. Co.** Production and sales headquarters are being moved from Dayton, Ohio, to the Rockwell plant at Hudson, N. Y. **J. F. Currivan,** vice president and general manager oft he Ross company, continues in the same capacity with Rockwell Packaging Machines.

Raymond F. Stilz has been named president of the **Paper Package Co.,** Indianapolis, Ind., succeeding **Walton M. Wheeler, Jr. Donald B. Fobes** is now vice president and general manager and **Edward H. Grebe** has been named secretary-treasurer.

A number of changes in the sales staff of **Ivers-Lee Co.,** Newark, N. J., have been announced. **Robert J. Miller** has been appointed resident regional manager of the western territory with headquarters in San Francisco. **M. J. Salfisberg** and **J. R. O'Meara** have been named divisional sales managers. New sales representatives are **James P. Measday, Dayton R. Males** and **William G. Ingram.** The company reports that it is increasing its contract packaging facilities.

Dr. Willard H. Dow, president of **The Dow Chemical Co.,** Midland, Mich., and **Mrs. Dow** died on March 31 in an airplane accident near London, Ont. Dr. Dow became active in the company in 1919 and assumed its leadership in 1930 upon the death of his father, Dr. Herbert H. Dow, founder of the organization. Dr. Dow was an international figure in industry and had been presented with many honors for his achievements in the chemical field.

J. W. Valiant, for many years vice president and a director of the **Harris-Seybold Co.,** Cleveland, Ohio, died following a heart attack March 12 in Miami, Fla.

Neal S. Sells, vice president and manager of **Food Machinery & Chemical Corp.'s Sprague-Sells Division,** San Jose, Calif., died on Feb. 19 of a heart condition.

Dr. Berthold Kaufman, president and board chairman of **Kupfer Bros. Co.,** died on March 10 at his home, Great Neck, N. Y., at the age of 78.

WOULD YOU RATHER

READ

ABOUT QUALITY . . .

. . . OR SEE IT?

CUT GREEN BEANS
This special variety of Green Beans has a deep, attractive color. Size is medium. The tender, young beans are cut into lengths of 1¼ to 1½ inches. Full-flavored, firm, and of excellent appearance.
CUT GREEN BEANS
Duraglas

● **The preference of women** for *seeing* quality has doubled demand for glass-packed foods since 1939. Customers want to see a product's goodness *before* they buy. Duraglas containers show them!

With 86%* of food sales self-service, tempting display is more vital than ever for higher impulse sales.

Duraglas containers are your best bet to keep your quality and brand in the public's eye.

*Average figure. Actually 87% of Independent and 85% of Chain Store sales are self-service.

Duraglas

TRADE MARK REG. U.S. PAT. OFF.

CONTAINERS SELL ON SIGHT

OWENS-ILLINOIS GLASS COMPANY • Toledo 1, Ohio • Branches in Principal Cities

Cases of Distinction

Molyneux

made by ARCON

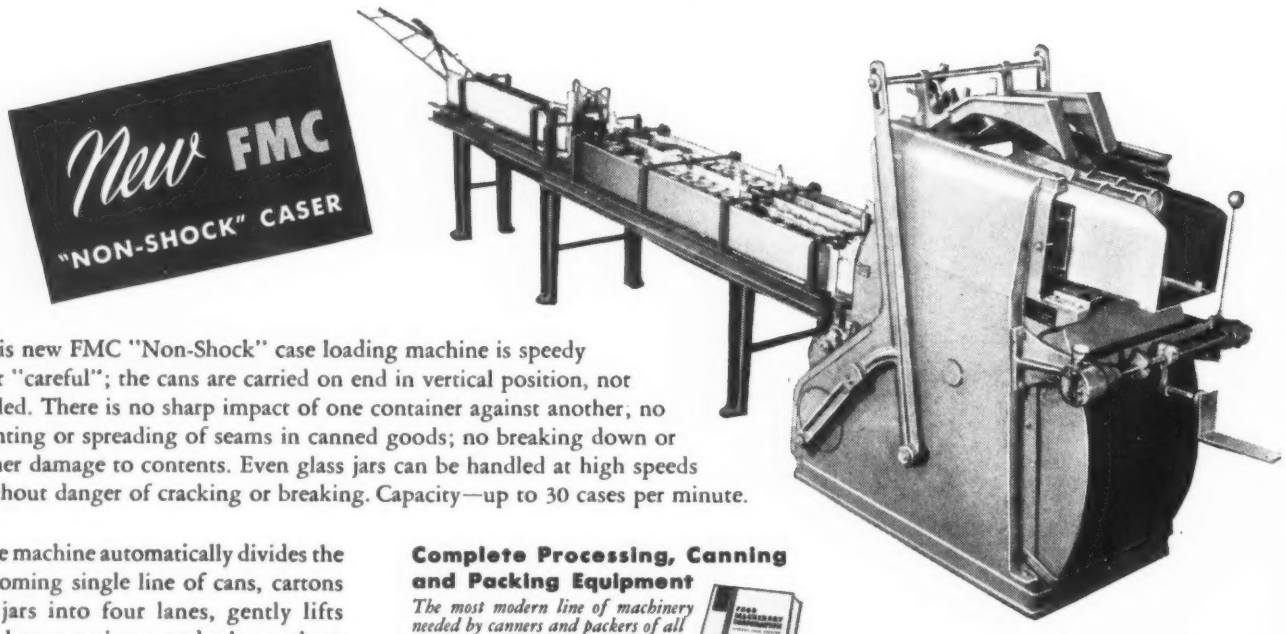
For outstanding appearance and appeal, ask Arcon to make your cases. They're made in any style, any size, and from a wide variety of materials.

Inquiries invited.

ARCON LEATHER PRODUCTS MANUFACTURING CO.

29 West 26th Street New York 10, N. Y. MUrray Hill 6-5599

SAY GOOD-BYE TO "ROUGH-HANDLING-LOSSES"!



This new FMC "Non-Shock" case loading machine is speedy but "careful"; the cans are carried on end in vertical position, not rolled. There is no sharp impact of one container against another, no denting or spreading of seams in canned goods; no breaking down or other damage to contents. Even glass jars can be handled at high speeds without danger of cracking or breaking. Capacity—up to 30 cases per minute.

The machine automatically divides the incoming single line of cans, cartons or jars into four lanes, gently lifts twelve containers and places them horizontally in the loading chute to form a tier; repeats operation to form a second tier; then pushes the double tier through the loading chute into the shipping case. The filled case is then automatically lowered to a conveyor or truck, ready for the warehouse or shipping platform.

Complete Processing, Canning and Packing Equipment

The most modern line of machinery needed by canners and packers of all foods and specialties is illustrated and described in the latest FMC Catalog No. 800 and supplements. Write for your Free copy.

K-502

FOOD MACHINERY AND CHEMICAL CORPORATION

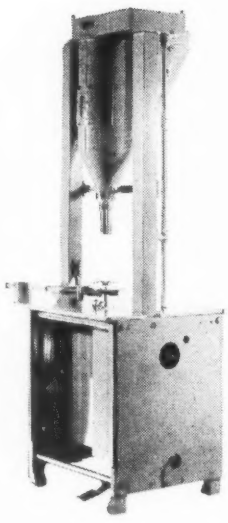
SPRAGUE-SELLS DIVISION • HOOPESTON, ILLINOIS

Sales Branches: Baltimore, Md. • New York, N.Y. • Rochester, N.Y. Bradford, Vt. • Cedarburg, Wis. • Lakeland, Fla. (Florida Division) San Jose, Calif. (Anderson-Barngrover Division)

Where TIME MEANS MONEY..

Specify

UNIVERSAL FILLER



If you need a machine that will fill 15 to 30 containers per minute, accurately and with minimum dust and spillage, the S & S Universal Filler is the machine for you.

For all free flowing Pastes, Powders and Granular Products

Today, Stokes and Smith Universal Fillers are handling over 150 different materials in plants throughout the country. These units are filling bottles, cans, packages, envelopes, boxes and bags from 1/4 ounce to 5 pound capacities.

The Universal Filler will handle your products gently and without pressure but fills accurately and tightly. For dusty products such as powdered milk and cocoa, the "Auger-Vac" attachment is available.

OTHER FILLING & PACKAGING MACHINES

"Speeds to suit your needs"
Write for further information

STOKES & SMITH Co

PACKAGING MACHINERY — PAPER BOX MACHINERY

A wholly owned subsidiary of
Food Machinery and Chemical Corporation

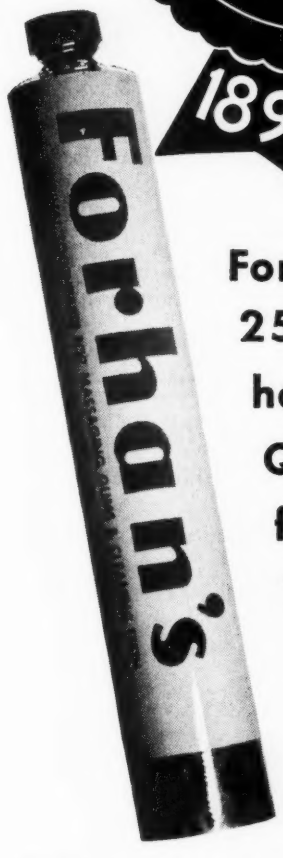
FILLING • PACKAGING • WRAPPING MACHINES

FRANKFORD, PHILADELPHIA 24, U. S. A.

TURNER TUBES

FIRST IN QUALITY

1898 1949



For more than 25 years we have supplied Quality Tubes for FORHAN'S TOOTH PASTE.

J. S. TURNER WHITE METAL COMPANY

NEW BRUNSWICK NEW JERSEY

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Elliott Sales Service
725 East 4th Street
Royal Oak, Michigan

CINCINNATI OFFICE
J. A. Bauer
521 Broadway
Cincinnati 2, Ohio

For Your Information

Announcement has been made that the program of the annual meeting of the **Society of The Plastics Industry** will highlight economics. The meeting will be held May 26 and 27 at the Edgewater Beach Hotel, Chicago. **C. L. Cruver, Jr.,** of **Cruver Mfg. Co.** is program chairman and members of the program committee include: **Meyer Goldman, The Visking Corp.; Harry Hill, Celanese Corp. of America; J. W. Stokes, Chicago Molded Products Corp.; R. J. Olson, Federal Tool Corp.; Arthur J. Bachner, Midland Die & Engraving Co.; Luther J. Evans, Mayfair Molded Products Corp.; W. H. Snow, Snow Plastics Corp.; C. N. Sprankle, Sandee Mfg. Co.; Joseph Bauman, Kurz-Kasch Co.** and **Louis E. Kahn, Parisian Novelty Co.** Technical meetings will be held during the conference for injection molders, fabricators, compression molders, extruders and on other phases of the industry.

Arthur Motley, publisher of *Parade,* will be a featured speaker at the 31st annual meeting of the **National Paper Box Mfrs. Assn., Inc.,** which is being held at the Waldorf-Astoria, New York, May 15 to 18 inclusive. **W. Clement Moore,** a member of the association, will present his survey of the paper box industry sales during 1948. **E. V. Brown,** president of the Canadian Paper Box Mfrs. Assn., is one of the special guests.

What's doing

May 15–18—**National Paper Box Mfrs. Assn.,** annual convention, Waldorf-Astoria, New York.

May 17–18—**Food & Container Institute,** annual meeting, Navy Base, Norfolk, Va.

May 17–18—**Fibre Box Assn.,** French Lick Springs Hotel, French Lick, Ind.

May 17–19—**The Toilet Goods Assn.,** Waldorf-Astoria, New York.

May 26—**Exhibitor's Advisory Council,** first annual trade show clinic, Statler Hotel, New York.

May 26–27—**Society of The Plastics Industry,** annual meeting, Edgewater Beach Hotel, Chicago.

May 29–June 3—**U. S. Wholesale Grocers Assn.,** annual convention, and **Food Distribution Industry Exposition,** Municipal Auditorium, St. Louis, Mo.

May 30–June 10—**Canadian International Trade Fair,** Exhibition Grounds, Toronto, Canada.

June 6–8—**Grocery Mfrs. of America, Inc.,** Cavalier Hotel, Virginia Beach, Va.

June 6–10—**National Confectioners' Assn.** and **23rd Confectionery Industries Exposition,** Stevens Hotel, Chicago.

June 12–16—**National Assn. of Retail Grocers** and **National American Wholesale Grocers' Assn.,** midyear meeting, Chicago.

Members of the executive committee for the **Folding Paper Box Assn.** for 1949–1950 are **Norman F. Greenway, Robert Gair Co., Inc.; William W. Fitzhugh, Wm. W. Fitzhugh, Inc.; D. A. Forsberg, Forsberg Paper Box Co.; Bayle M. Richardson, Richardson Taylor-Globe Corp.; Ira C. Keller, Container Corp. of America; Ralph A. Powers, Robertson Paper Box Co., Inc.,** and the new FPBA president, **M. G. Fessenden** of **Ace Carton Corp.**

James P. Kinney of Gordon, Kinney & Staninger, Inc., Detroit, has been named general chairman of the fourth annual **Industrial Packaging and Materials Handling Exposition,** to be held Oct. 4 to 7 in Detroit's Convention Hall. Sponsored by the **Society of Industrial Packaging and Materials Handling Engineers,** the exposition will be preceded by an educational conference directed by **Dr. Spencer A. Larsen** of Wayne University beginning Oct. 2.

New officers for the **Laminated Foil Mfrs.' Assn.** have been announced. **Donald E. Campbell, Standard Rolling Mills, Inc.,** was elected president and **Fred C. Kaiser, Keller-Dorian Corp.,** vice president. Members of the executive committee include: **Paul Murphy, Reynolds Metals Co., Robert E. Hunt, National Foil Co.,** and **Arthur A. Thomas,** who also serves as executive director. The association offices are at 1002 Union Trust Bldg., Providence, R. I.

The 34th Annual Conference on Weights and Measures was held last month in Washington, D. C. During the four-day conference members heard speeches on "Shrinkage on Packaged Wheat Products," by **J. L. Harvey,** FDA; "Quantity Declarations on Packaged Soap Products," which was delivered jointly by **J. A. Bernard,** St. Louis, Mo., and **R. W. Peet,** representing the Assn. of American Soap & Glycerine Products, Inc.; "Systematized Package Supervision," **I. M. Levy,** Chicago, and "Commodity Tolerances," **R. K. Slough,** Akron, Ohio.

Officials of the **National Food Brokers Assn., National Canners Assn.** and **Canning Machinery & Supplies Assn.** have announced the dates for the joint 1950 and 1951 conventions. The 1950 convention will be held in Atlantic City, N. J., Jan. 22 to 31, inclusive, with the food sales conference in the period of Jan. 22 to 27 and the production and machinery period of the conference from Jan. 28 to 31. The same type of plan will be repeated at the 1951 convention in Chicago.

The Paraffined Carton Research Council, Chicago, has released a new study of butter packaging and marketing, "Increasing Butter Sales and Profits." For information on how to secure a copy, write to the council at 111 W. Washington St.

The Lithographers National Assn. is holding its 44th annual meeting May 10 to 13 at Riverside, Calif.

The American Standards Assn. has adopted three standard sizes for its publications. For pamphlets, the new size is $8\frac{1}{2}$ by 11 in.; for books, 6 by 9 in. and for pocket-size

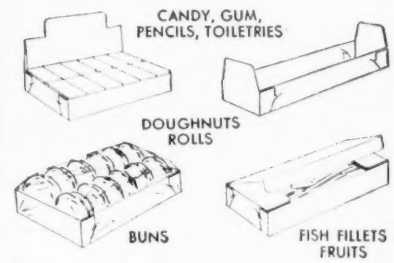
Another Plant Cuts Packaging Costs with New High-speed Carton Set-up Machine

AT FRENCH BAKERY CO., CLEVELAND, the Tray-Lock Machine has substantially cut the cost of packaging sandwich buns. Here the packer puts 6 buns in carton set up by the machine, which can attain speeds of 90 units per minute. Output is easily synchronized with the operator's filling capacity.

Replaces expensive hand set-up method with automatic General Mills Tray-Lock Machine

If your product can be packed in a lock-type carton, the odds are you can cut your packaging costs with the Tray-Lock Machine just as the French Bakery Co., Cleveland, has done. Candy, tomatoes, frozen fish, medical supplies, novelties, plastic items are all being packaged cheaper and faster with this new machine, which sets up cartons automatically from flat, unglued blanks.

A VARIETY OF CARTON STYLES are produced by the Tray-Lock Machine ranging from 1" to 18" in width, 2" to 14" in length, and ¾" to 6" in height. Cartons are neatly squared, have straight, sturdy sides with no diagonal scores to weaken them.



Mechanical Division
General Mills, Inc.
Packaging Machinery

Made by one of the world's largest users of packaging machinery

SEND US a description of your product and the cartons you're now using. We'll be glad to give you complete information about the results you can expect from the General Mills Tray-Lock Machine, together with prices and specifications. Send this coupon today!

General Mills, Inc., Dept. M-59
1620 Central Avenue, Minneapolis, Minn.

I am enclosing samples of our present cartons and a description of our product. Please send complete information on the Tray-Lock Machine and tell me how it can be adapted to our packaging operation.

NAME.....POSITION.....

FIRM.....

ADDRESS.....

CITY.....ZONE.....STATE.....

Look to . . .

Watson-Standard

FOR THE UNUSUAL IN PAPER COATINGS

for *Modern Packaging*

Whether you are looking for better gloss, more depth, chemical resistance, flexibility, water proof and grease proof, or other characteristics, we have the answer.

The experience of the Watson-Standard laboratories in the development of decorative and functional coatings for use on paper, board and foil has been widely recognized by packaging designers and engineers.

If you are working on a package for a new product or the redesign of your present line, let us help you with your problem. There is no obligation. Write today.

℞ TOUGH JOB HEADQUARTERS
Prescription Finishes

Give us your coating problem. We guarantee you an answer based on your conditions, and not just a standardized formula.

THE WATSON-STANDARD CO.

Manufacturers of
PAINTS • VARNISHES • INDUSTRIAL FINISHES AND LITHOGRAPH COATINGS

FACTORY AND GENERAL OFFICES: PITTSBURGH, PA.
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For Your Information
(Continued)

books, 5¼ by 7¾ in. The association said that most of its publications would be in the pamphlet size since surveys showed that this size was most convenient.

An unusual exhibit at the recent **National Frozen Foods Exposition** was the one by **Stecher-Traung Lithograph Corp.** A complete kitchen was set up in which Jean McDougall Page, home economics consultant, demonstrated frozen foods. Mrs. Paige provided customers with kitchen-tested recipes for frozen food packages and for labels on canned and other packaged foods.

As part of its educational campaign to acquaint more people with the advantages of sealing packages with gummed tape, the **Gummed Industries Assn.** exhibited at the recent convention of tobacco distributors in New York. In addition to a display, the association showed its sound slide film, "How to Seal It Right With Gummed Tape."

The Can Mfrs. Institute reports that metal can shipments to packers of all types of products totaled a record-breaking 3,247,062 tons last year. The previous top yearly figure established in 1947, according to the institute, citing U. S. Dept. of Commerce figures, was 2,956,452 tons. The greatest increase was registered in the production of non-food cans, where a rise of over 11% was made.

Announcement has been made by the **Lithographic Technical Foundation,** New York, concerning price changes for publications and course materials. Shop manuals published by the foundation have been increased from 50 cents per copy to 75 cents; research and technical bulletins from $1 to $2 and $2.50, depending upon which is specified, and skilled craft texts, special subject texts and miscellaneous publications from $1 to $2. Complete information may be obtained by writing the foundation at 131 E. 39th St.

The first annual trade show clinic under the auspices of the **Exhibitor's Advisory Council** will be held May 26 at the Statler Hotel, New York. Head of the clinic committee is **F. L. Triggs, Riegel Textile Corp.**

A number of companies from the United States will exhibit products at the **1949 Canadian International Trade Fair** in Toronto, May 30 to June 10. Products are grouped into 13 catagories ranging from household furnishings and textiles to automotive equipment and building materials.

Representatives from every major paper box manufacturing company in New England attended a one-day clinic recently held in Providence, R. I., under the sponsorship of the **National Paper Box Mfrs. Assn.** Two clinic panel-type discussions featured the meeting.

The Office of Domestic Commerce, Washington, D. C., has issued an amendment to allocation order M-81 covering cans. The order provides for the continuation at the rate of consumption of tin for cans, the same rate which has prevailed since 1947.

The merchandising service department of **Swift & Co.,** Chicago, has made a candid camera film of how consumers shop from self-service meat cases, now available for showings to dealer group meeting. The film demonstrates the

For Your Information
(Continued)

need for carefully packaging self-service meats, as it shows women pinching, poking, comparing and sorting the displayed product as they make their purchases.

Owens-Illinois Glass Co. is now introducing a new 16 mm. sound and color motion picture, "Toward Better Pharmacy," which is based on the report of a consumer survey on prescription departments of drug stores. The film may be obtained from any of the company's branch offices for showings to interested groups.

A scene from the movie.

Board Products Publishing Co., Chicago, announces the publication of "The Package Engineering Handbook," by **Walter Stern,** packaging director of **Barnes & Reinecke, Inc.,** Chicago. Its seven chapters are devoted to describing and illustrating the principles of package engineering. The book retails for $7.50 (domestic) and $8.50 (foreign).

Holyoke Card & Paper Co., Springfield, Mass., now has available a catalog of its Brightwood heavy wrap and box cover papers, both foil and paper, in Christmas designs.

During the recent annual meeting of the **Associates of the Food & Container Institute,** members were treated to a cruise on Chesapeake Bay aboard a Navy aircraft carrier. The meeting was held at Norfolk, Va., under the sponsorship of the Navy.

The legal and commercial aspects of trademarks and trade names have been written about concisely and informatively in a new book, "Trade-Marks," by **H. Bennett,** technical director of **Glyco Products Co., Inc.,** published by Chemical Publishing Co., New York. The price is $10.

Two publications just published by **The Hinde & Dauch Paper Co.** are "How to Select Vending Displays That Increase Sales," one of its Packaging Library Series, and "Pack to Attract." Request copies from the company at Sandusky, Ohio.

Lippincott & Margulies, Inc., New York package designers, have published "Marketable Packaging." It is written to serve management as a guide in determining the sales effectiveness of their own packages. Copies of the book are $4.75 each and may be obtained by writing the company at 500 Fifth Ave.

A new 1949 catalog of ribbons and decorative papers for gift wrapping has been issued by **Taffel Bros., Inc.,** New York. Copies may be obtained by writing the company at 95 Madison Ave.

The Plastics Club of the United States, Inc., New York, will hear **Elson Cahn,** sales manager of the **Visking Corp.,** give a talk on polyethylene—its uses for packaging and consumers' goods—at their meeting, May 26. The company is sending its Packaging Show exhibit to New York especially for the talk.

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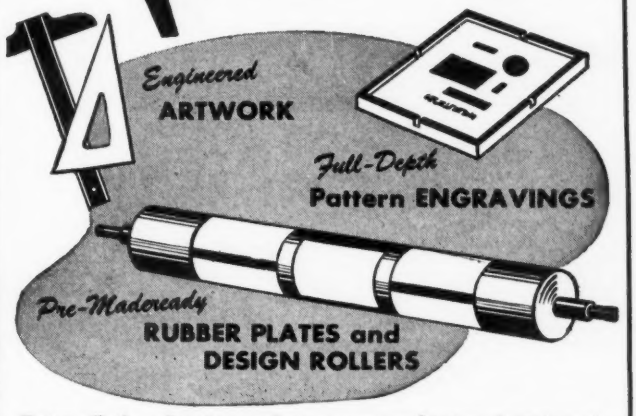

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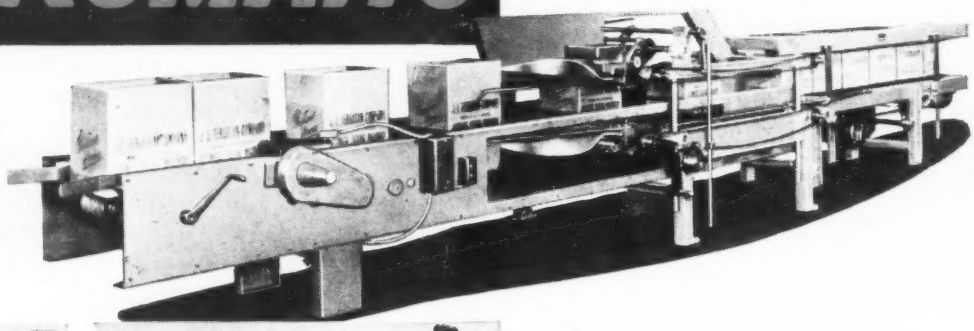
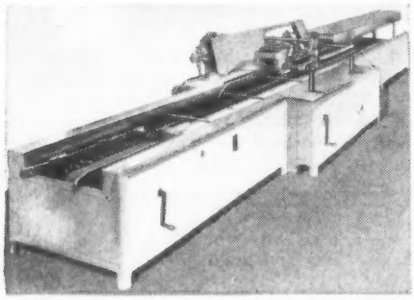
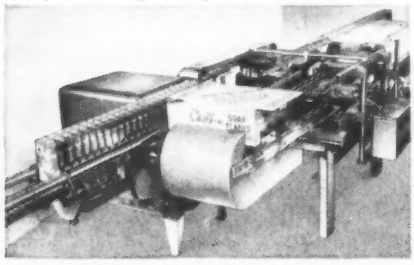
From PACKOMATIC today, you can count on *speedy delivery* of any one of seven standard shipping case gluing and sealing combinations. Also special applications of any of these long-tried and widely-used standard units.



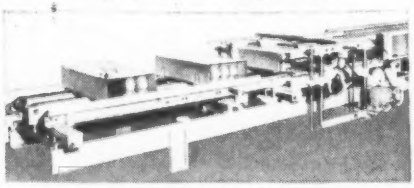
1 Model "D" shipping case gluer-sealer for high speed, moderate or slow production lines. Automatically applies wide variety of glue spreads. Handles both light and heavy corrugated or solid fiber containers. Adjustable for wide variety of case sizes and weights.



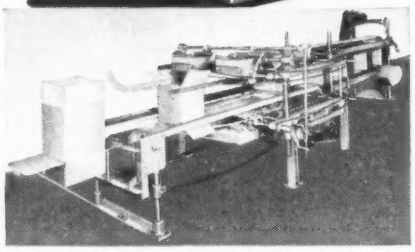
2 "STREAMLINER" Model "D" case gluer-sealer for food, dairy and beverage operations open to public.



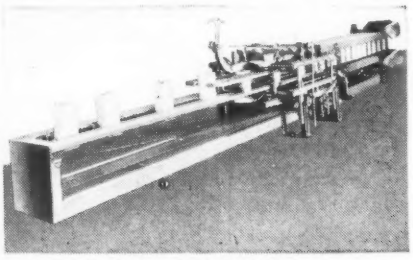
3 COMBINATION END LOADER-SIDE SEALER takes round or rectangular packages, assembles and loads them into cases previously squared and registered.



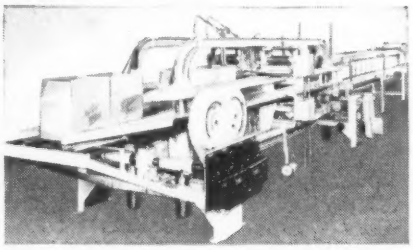
4 SIDE GLUER-SEALER for cases going through in *horizontal* position such as end-open, tall and narrow cases with overlap as well as regular butt flaps.



5 MODEL "G" top and bottom sealer for slow production lines not employing conveyors. Ideal for glass, dinnerware and lamps.



6 EXTENDED INLET CONVEYOR attached to Model D for handling cases packed directly on feed-in plate.



7 *ELECTROMATIC* heavy duty top and bottom gluer-sealer with electrically operated adjusting mechanism, for frequent, quick case size changes.

If you use paper shipping cases to get your product to market, you need *MODERN* gluing and sealing equipment to help get it there in good condition. To do this job quickest and most economically, call on PACKOMATIC's quarter century of designing and building experience to tell you which of its many shipping case gluing and sealing units is best adapted to your particular need.

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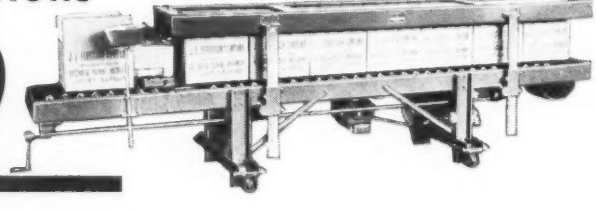

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Gentlemen:

What is the average life of a lithographed display? Two or three weeks? We have some that have been in service FOR 17 YEARS. And they're still going strong.

In 1931 you produced for us our first series of six pictures, depicting high spots in optical history. They faithfully followed the original oil paintings in color and texture. The only "commercial" was our copyright line.

These pictures were an immediate hit. The ophthalmic professions (ophthalmologists, optometrists, opticians) wanted them for their walls and windows. Science teachers were quick to recognize their value as a teaching aid. They appreciated the permanent frames we provided.

Recognizing a long potential life and sustained demand, we ordered enough to last several years. When our original supply was exhausted, we issued a second series, in 1937. And now you have just completed our third run—a reprint of the most popular subjects.

Over the years, we have regarded these pictures as sound institutional advertising. They have established a pattern which has been widely imitated. They have earned for us boundless good will.

It seems appropriate, at this time, to express our deep appreciation to you and your organization for your splendid help and expert workmanship in the development of this idea.

Cordially yours,
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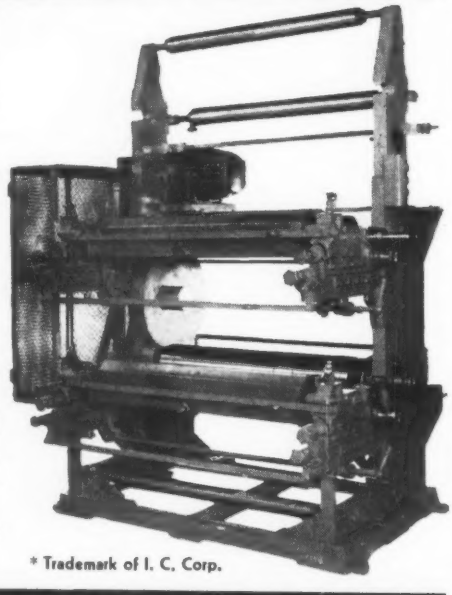

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MANHASSET MACHINE COMPANY
MINEOLA, NEW YORK

U.S. Patents Digest

Edited by H. A. Levey

This digest includes each month the more important patents which are of interest to those who are concerned with packaging materials. Copies of patents are available from the U. S. Patent Office, Washington, at 25 cents each in currency, money order or certified check; postage stamps are not accepted.

Inhaler for Treating Sinus and Hay Fever and Method of Sealing a Medicament Therein, G. T. Davisson, El Paso, Tex. U. S. 2,462,169, Feb. 22. A method of injecting and sealing a medicament in a container, which consists in first wrapping tightly an absorbent material around a tube, then inserting the thus wrapped tube in said container, then filling tube with medicament and withdrawing tube, leaving medicament in said material and finally sealing both inlet and outlet ends of the container.

Multiple-Lane Wrapping Machine and Method. S. J. Campbell, Green Bay, Wis. U. S. 2,462,254, Feb. 22. In a multiple-lane wrapping machine having means for feeding a plurality of articles along adjacent paths, means for feeding a broad wrapping web upon which individual wrapper designs are printed in adjacent series and means for slitting web into separate strips, each containing a series of wrapper designs.

Cigarette Dispensing Container and Lighter, F. Stein, Bridgeport, Conn. U. S. 2,462,231, Feb. 22. In a combined container and lighter for cigarettes, a case including vertical side and end walls and adapted to contain a plurality of vertically superimposed side-by-side cigarettes, with ends of cigarettes substantially in guided engagement with end walls, a fixed horizontal cigarette-guiding abutment wall in case extending partially across it and terminating in inwardly spaced relation to one end wall and vertically abutting upper side of a portion of uppermost cigarette in case between its end to be lighted and a point substantially inwardly spaced from its mouth-engaging end.

Dispensing Mechanism, S. J. Heiman, St. Louis, Mo. U. S. 2,462,394, Feb. 22. In a dispenser for bottles, a magazine having an upper portion for storing a plurality of bottles in direct interengagement substantially horizontally one above the other and having an open end through which the bottle may drop.

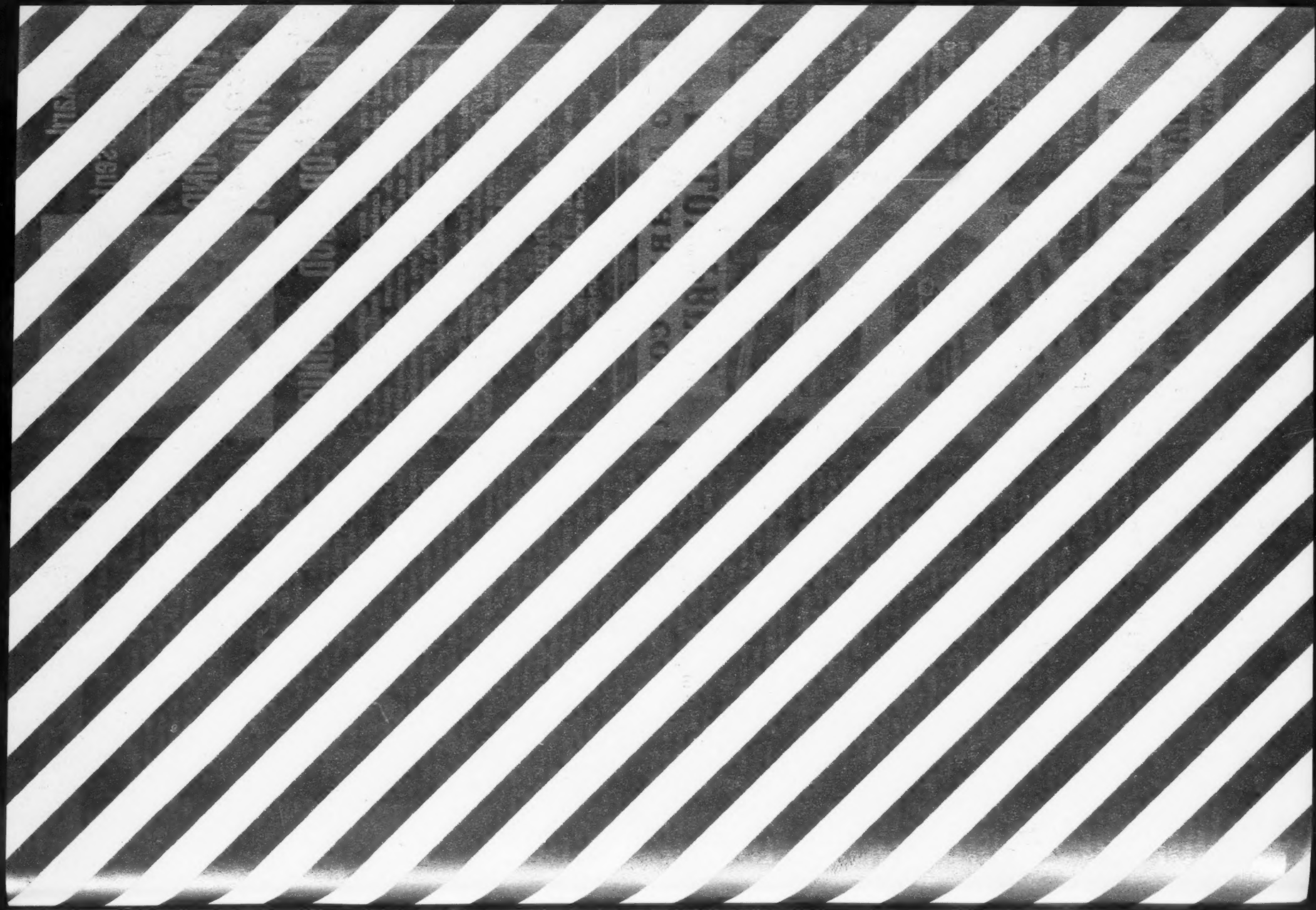
Airtight Lid for Containers, H. Weiss, London, England. U. S. 2,462,445, Feb. 22. A closure for the mouth of a container, closure comprising a flexible sealing ring and pressure means providing inner and outer pressure members between which said flexible sealing ring is located.

Carton Closing Machine, J. W. Binsack (to Beech-Nut Packing Co., Canajoharie, N. Y.). U. S. 2,462,460, Feb. 22. In a machine for use in closing cartons having side flaps hingedly connected to the side wall thereof, the combination of means for feeding cartons longitudinally with the side flaps in partially raised position and means acting automatically as the cartons are thus being fed to bend the side walls inwardly adjacent the hinged connections with the side flaps to cause the side flaps to be swung upwardly to a predetermined position.

Vacuum Jar and Bottle Combines, M. F. Bird, Cushing, Wis. U. S. 2,462, 461, Feb. 22. A thermos bottle, a casing externally jacketing the bottle, casing embodying a cylinder which is open at its bottom, open bottom portion being screw-threaded, open bottom portion projecting well beyond the bottom of the bottle, an annular ledge provided with a packing ring, ledge being secured on interior of cylinder and providing a partitioning and supporting member for the bottom of the bottle, said ledge embodying an endless screw-threaded depending neck and a jar-closing cover, said cover having a screw-threaded portion detachably threaded on said neck.

Box-Folding Machine and Method, W. H. Kucklinsky, Paramus, N. J. U. S. 2,462,513, Feb. 22. Method of folding a transverse flap on a transverse edge of a box blank as such blank travels continuously, which comprises conveying means, folding means and careful timing at the folding station.

Bottle Carton, M. A. Riley and D. C. McClelland (to The Baltimore Paper Box Co., Baltimore, Md.). U. S. 2,462,676, Feb. 22. A carton provided with first and second pairs of opposite walls, a pair of top flaps hingedly connected with upper end of each wall of first pair of walls and a double divider arranged in



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gift wrapping papers
display papers

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U.S. Patents Digest
(Continued)

the carton and having hand-hole flaps projecting upwardly between and above top flaps.

Shipping Box, B. A. Wabshaw, Des Moines, Iowa. U. S. 2,462,693, Feb. 22. A shipping container comprising a rectangular bottom, four separate walls each connected at lower edge to bottom and swingable outwardly from the vertical about an axis substantially coincident with the connection between wall and bottom; each corner member comprising two wings set at right angles and each provided with a plurality of generally horizontal slots, walls being provided with projections adjacent their edges for slidably engaging said slots.

Dispensing Cabinet, C. Schner, Jr., and H. and F. Zeiser (to Sentinel Products, Inc., New York, N. Y.). U. S. 2,462,816, Feb. 22. In a cabinet from which are dispensed in strip form small articles individually mounted on cards, said cabinet being of the type comprising a box adapted to hold a plurality of strips of article-bearing cards, a cover having a square front edge and having positioned above and corresponding to each strip a slot through which said strip passes and means within box for guiding each strip to its particular slot.

Case-Filling Machine, C. H. Neer (to The Burt Machine Co., Baltimore, Md.). U. S. 2,462,888, Mar. 1. In a case-filling machine having a reciprocating load-transfer plunger: load-supporting shelves located in a load-supporting space for supporting cans in the path of the plunger, means for feeding cans to said space by rolling, shelves being inclined downwardly in the direction of feed.

Control Mechanism for the Opening and Closing of Containers, H. Chabbert, (to Kenneth T. Caplinger, Seattle, Wash.). U. S. 2,463,086, Mar. 1. Opening and closing mechanism for a container, more specifically for a lipstick holder carrying the lipstick on a thimble, which comprises in combination an external handling piece protruding from one end of the holder, two arcuate caps pivotally mounted at the other end of holder for swinging movement between positions opening and closing the end of holder, control being mounted for guided longitudinal movement with respect to the holder and having an inclined slot therein.

Fabric, L. A. Savage (to The Kendall Co., Boston, Mass.). U. S. 2,463,122, Mar. 1. A woven article for use as a cheese bandage having, when opened, the shape of a truncated cone which comprises two fabric plies connected at their side edges by strip interwoven areas in diverging relation to one another, of which the warp ends extend transversely about the bandage.

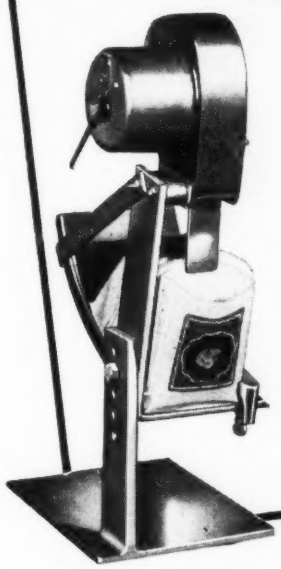
Sacking Device, J. J. Byberg, Silverton, Ore. U. S. 2,463,085, Mar. 1. A pair of endless conveyors moving in transversely spaced planes, each conveyor passing over a supporting element at each end of its path, each conveyor carrying sack-engaging members at spaced intervals, so that when the mouth of a sack is attached to engaging member it will be held open, and means for delivering material to be sacked into open mouth.

Satchel Bag Having Reinforced Side Walls and Handle, H. C. Orchard (to Orchard Paper Co., St. Louis, Mo.). U. S. 2,463,302, Mar. 1. A paper bag of rectangular shape and having a median longitudinal seam on one panel for substantially entire bag length, reinforcing strips of paper adhered to the front and rear panels of bag and of co-extensive length and width as the seam overlap, reinforcing strip secured to unseamed panel being sufficiently stronger than other to compensate for seam overlap and make both panels of equal load-carrying strength, finger-receiving apertures through both panels and reinforcing strips and tongues struck up from the bag at edge of each aperture so that when tongues are bent together through apertures and brought upwardly against one panel the bag may be carried thereby.

Carton Securing Means and Method of Using Same, R. C. Potts, Takoma Park, Md. U. S. 2,463,306, Mar. 1. A carton with a plurality of connected panels of material, certain panels being hingedly secured to others to form overlapping closure with perforations in registering relationship in overlapping panels and a fastener element with body portion and leg portion inserted through registering perforations, the body portion being in the form of a loop.

Container, W. A. Ringler (to Gardner-Richardson Co., Middletown, Ohio). U. S. 2,463,313, Mar. 1. The method of sealing a container consisting of an outer carton having enclosing walls and end closure flaps and an inner heat-sealable member, the method comprising bringing together in flattened relationship two oppo-

Faster... AT BAGGING PRODUCTS AT BAGGING PROFITS



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Proposed applications of these new materials include their use in bulk packaging of hygroscopic materials; for jar and bottle cap liners to seal pharmaceuticals, cosmetics, dehydrated dairy and food products; and as liners for cartons, barrels, and tubular containers.

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SET-UP, FOLDING AND PLASTIC CONTAINERS

U.S. Patents Digest
(Continued)

site walls of inner member and folding them over the end closure flaps and applying heat and pressure for sealing end closure and walls.

Display Card Folder and Sample Kit, S. Wechsler, Brooklyn, N. Y. U. S. 2,463,338, Mar. 1. A display card with central section and side wing sections hinged thereto to fold on and against the central section, all sections having a row of article-holding compartments, each section having a back sheet, an intermediate and a facing sheet attached to back sheet, the intermediate sheet having cut-out opening forming the article compartments and the facing sheet having matching openings therefor.

Dispensing Carton for Paper Rolls, F. C. Gluck (to Minerva Wax Paper Co., Minerva, Ohio). U. S. 2,463,375, Mar. 1. A dispensing carton with side and end walls, a bottom and a cover hinged to side walls and extending from one end wall to the other, fold-down flaps narrower than and movable with respect to end wall and secured to ends of cover and in length equal to the depth of dispensing carton to support cover at ends from bottom and having a cutter carried by other side wall with a cutting edge adjacent top edge.

Can-Opening Machine, J. Hrabarchuk, St. Boniface, Manitoba, Canada. U. S. 2,463,276, Mar. 1. A can-opening machine comprising: a framework with pair of spaced endless chains mounted for movement thereon, lugs spacedly carried by chains, pointed blade fastened to framework, lengthwise to chains and therebetween; cutting disks mounted on framework and positioned to ride against edges of blade and means for driving chains and cutting disks.

Can Package Stripping Machine, J. C. Strickler (to American Can Co., New York, N. Y.). U. S. 2,463,576, Mar. 8. A packing-stand mechanism for stripping a package unit of containers from within an apertured mold supporting a bag into which the containers are packed.

Box, A. C. Anderson (to Liberty Can & Sign Co., Lancaster, Pa.). U. S. 2,463,586, Mar. 8. A slide-cover-type box comprising a body formed with a uniform diameter top-edge curl having end portions of circular cross-section and medial portions respectively extending lengthwise of the respective sides of said body from the respective ends of one end portion to the respective opposed ends of the other end portions of said curls and constituting therewith a continuous smooth upper and outer curved surface extending to the extreme lateral outer points of curl on opposite body sides.

Container and Closure, F. W. Krueger (to Food Machinery & Chemical Corp., San Jose, Calif.). U. S. 2,463,701, Mar. 8. In combination, a container having an outwardly declined sealing surface on its top face terminating in a rounded rim at its mouth and a plurality of spaced projections on its periphery below sealing surface, each provided with an inwardly declined lower surface, and a cap for closing container.

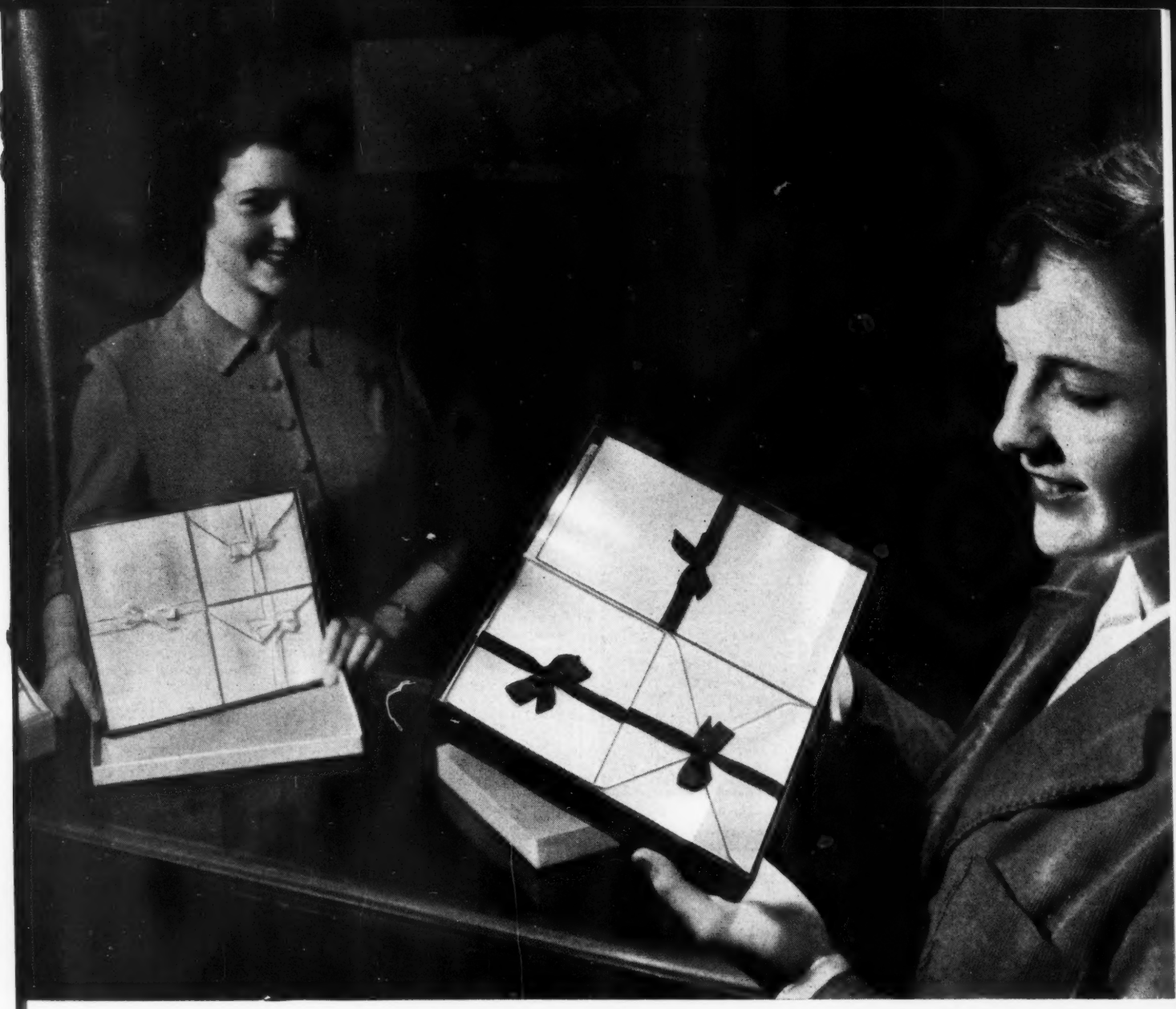
Bottle Carrier, H. E. Stevens, Southold, N. Y. U. S. 2,463,651, Mar. 8. A bottle holder comprising an elongated strip angulated medially its length to provide a relatively straight portion and an arcuate handle, the free end of strip being angulated to form a laterally projecting support for engaging the bottom of a bottle.

Merchandise and Display Card, M. Loeb, New York, N. Y. U. S. Re: 23,088, Mar. 8. A display card, an article of hardware flatly fitting against the front face of card, article having screw-receiving openings therein, fastening screws having their shanks freely passing through openings, with heads interposed between front face of card and rear of article.

Box Lid, N. A. Leash, Scappoose, Ore. U. S. 2,463,982, Mar. 8. A box lid comprising shooks and cross cleats, each cleat having a plurality of grooves in its top face extending transversely across the grain of the wood of said cleats and having tongues of sufficient width to be securely wedged in grooves, the engagement of tongues in grooves holding shooks firmly in place on said cleats.

Bag for Merchandising, G. A. Moore (to Reynolds Metals Co., Richmond, Va.). U. S. 2,463,992, Mar. 8. A semi-rigid commercial package which comprises a bag of the gusset type having front and rear panels and gusseted end panels formed of clear heat-sealing sheet material and a cradle of flat, stiff, but non-resilient sheet material bonded to at least one panel of the bag, whereby the bag may be supported in an upright position and the merchandise be seen through a substantial portion of the bag.

Carton, J. A. Zinn, Jr., Chicago, Ill. U. S. 2,464,065, Mar. 8. A blank comprising a flat sheet having a first panel, a second



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In the shop, the package does double duty. It *displays* the contents in true colors and textures—thus aiding selection, saving sales effort. At the same time, it protects the merchandise from fingering—keeps it fresh and clean, salable. At home, the window keeps out dust and dirt, enables the owner to determine the contents at a glance. In addition, it doubles as a handy tray.

Kodapak Sheet comes in two basic forms: Kodapak I Sheet, cellulose acetate, supplied in gauges up to 0.060″; Kodapak II Sheet, cellulose acetate butyrate, in gauges up to 0.002″. Both are made under the same rigid conditions, to the same high standards, as Kodak photographic film base.

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Kodak

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U.S. Patents Digest
(Continued)

panel, a third panel, a fourth panel and a connector section, said panels and connector section being divided from each other by crease lines, connector section adapted to lie flatwise against first panel to provide a tube of rectangular cross-section.

Bottle Carrier, R. G. Benson (to Benson & Associates, Inc., Cook County, Ill.). U. S. 2,464,069, Mar. 8. A bottle carrier comprising an elongated, flat-bottomed, leakproof bag of flexible fabric resistant to chemical action; a thick, flat, resilient, removable, shock-absorbing disk; a thick, cylindrical, resilient, removable, shock-absorbing inner liner of a size to fit snugly within the bag and of a length corresponding approximately to the length of the cylindrical portion of a bottle to be carried.

Packaging Machine, N. S. Ross (to Pneumatic Scale Corp., Ltd., Quincy, Mass.). U. S. 2,464, 099, Mar. 8. In a packaging machine having carton-supporting means adapted for supporting in a predetermined position a rectangular carton having a body portion, top flap-forming portions and a score line defining said portions and having the flap-forming portions connected by weakened portions at the corners extending from the top down to score line, mechanism for expanding and separating flap-forming portions from one another along weakened portion to form the top closing flaps.

Crated Sheet-Material Package, J. Robinson, Jr. (to Marsh Wall Products, Inc., Dover, Ohio). U. S. 2,464,153, Mar. 8. A package of substantially flat sheets of wallboards of similar size and shape, comprising a plurality of such sheets placed in face-to-face relation with corresponding edges in substantial alignment to form a stack and means for securing sheets in such aligned relation to form such package, having metal channel-shaped side members embracing the sides of the stacked sheets.

Partition for Containers, L. W. Roselieu (to S & S Corrugated Paper Machinery Co., Inc., Brooklyn, N. Y.). U. S. 2,464,154, Mar. 8. A cellular structure comprising a plurality of waved double-faced corrugated boards, each having a succession of waves producing oppositely directed successive troughs and a plurality of flat double-faced corrugated boards, the flat boards and the waved boards alternating in the structure, the flat boards being connected to the crests of the waves of the waved boards.

Handle Reinforcing Means for Containers, J. C. Morris (to The Ohio Boxboard Co., Rittman, Ohio). U. S. 2,464,337, Mar. 15. In combination with a paperboard container having walls of double thickness, each formed by folding the material of such wall upon itself, and in which the line of fold constitutes the upper edge of the wall, an attachable and removable handle member having an offset free end; an opening provided in upper edge for permitting entrance of the offset free end of handle member therethrough and between the wall thickness, and means for reinforcing wall to form a bearing for withstanding outwardly exerted pressure off the thus inserted offset handle end against the inner surface of fold line.

Folding Box Set-Up Machine, D. Levkoff, Great Neck, N. Y. U. S. 2,464,407, Mar. 15. An automatic folding box set-up machine comprising in combination a vertically reciprocable platform, means for imparting reciprocation to platform, a hopper for supporting a plurality of collapsed boxes in stack formation, means for individually feeding boxes from the hopper to the platform when the platform is in its uppermost position, means for initially unfolding a collapsed box and means for ejecting a completely set-up box from the platform.

Bag-Filling Machine, F. Ahlburg and E. H. Hunt (to—Ahlburg to D. Ahlburg and Hunt to M. F. Jones, both of Los Angeles, Calif.). U. S. 2,464,545, Mar. 15. In a filling and weighing machine for handling articles such as citrus fruit, apples, potatoes and the like, a pivoted weighing beam, means for supporting an article-receiving means from one end portion of the beam, means for conveying articles along a predetermined path and article-guide means along one side of path formed to provide an opening through which the article may pass to drop into receiving means.

Method of Sealing Ampules, F. D. Palmer (to F. D. Palmer, Inc., Chicago, Ill.). U. S. 2,464,765, Mar. 15. The method of producing a filled, closed ampule from a conventional straight-walled ampule, which comprises the steps of heating a circumferential part of the ampule above the normal level of the content of the ampule and when such part is sufficiently heated, forming a reduced neck in the ampule above said content level by applying to said part pressure directed inwardly and toward the bottom of the ampule to avoid stretching and incidental reduction of the thickness of neck which will ultimately close the ampule.

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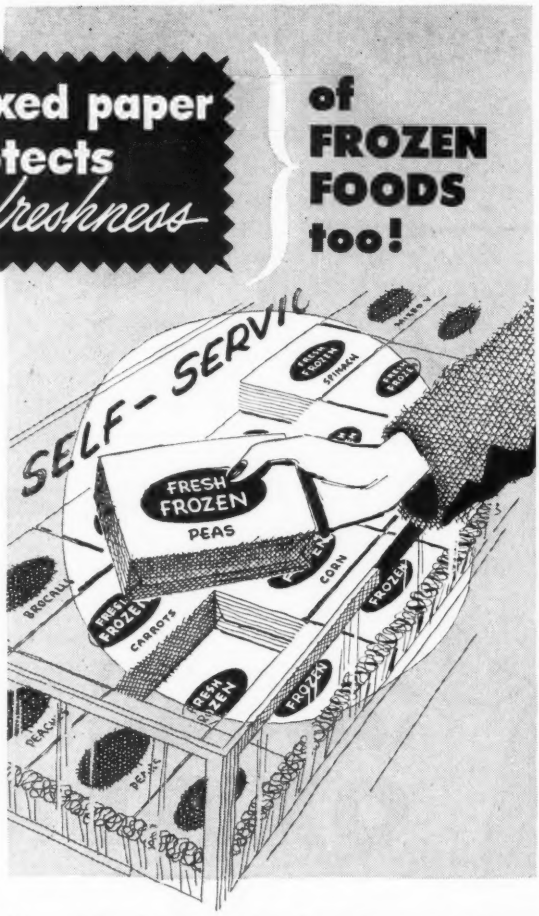

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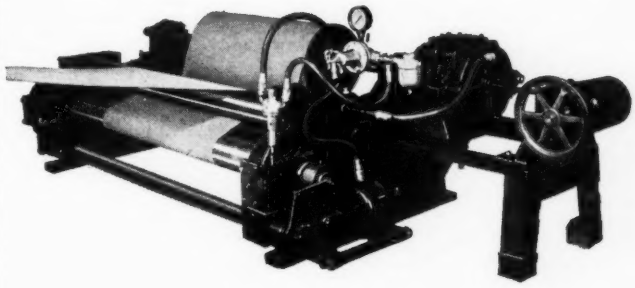

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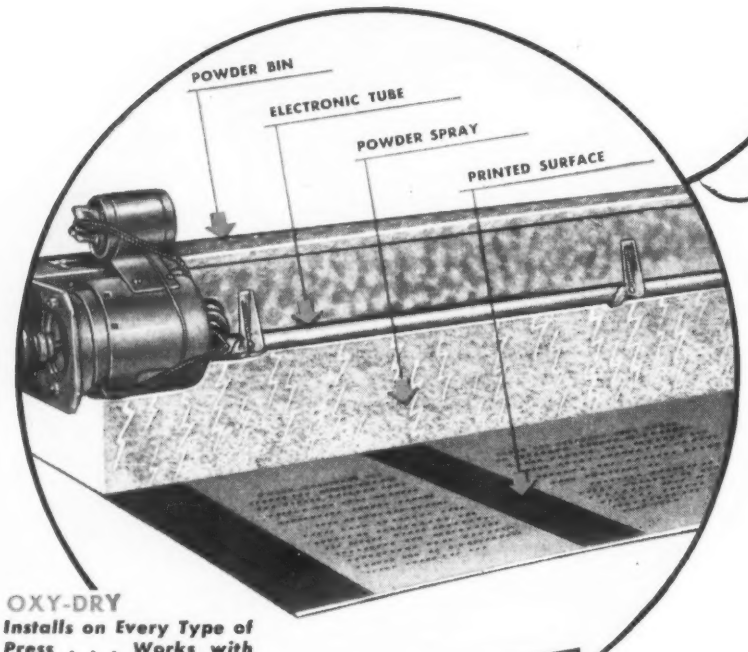

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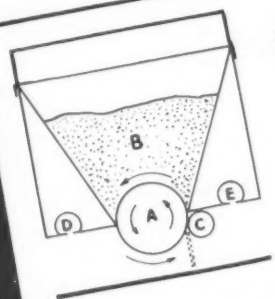

As brass cylinder (A) revolves, anti-offset powder (B) is distributed past

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Packaging Show of record size

The management of the AMA Packaging Conference and Exposition—which was assembling in Atlantic City as this issue went into the mails—was forced at the last minute to increase the exhibit area by 15,000 sq. ft. to accommodate 17 additional exhibitors, so that a show of record size was assured. Final plans show an increase of 15% in space and 16% in number of exhibitors over last year.

The timing of the Exposition and Conference makes it impossible to include the usual Conference report in this issue of MODERN PACKAGING, but a complete report, including summaries of all Conference reports and discussions, will appear in the June issue.

The association cites the increased demand for space as evidence of the growing emphasis on packaging, packing and shipping as a major factor in intensified efforts to boost sales and cut production costs.

Approximately 15,000 representatives of virtually every type of business were expected to be in attendance at the Exposition and the concurrent Conference on Packaging, Packing and Shipping.

Squeeze-tube for nasal spray

(*Continued from page 99*) fact that we could get flash heat cycles via high-frequency current and by using a specially treated paper buffer and special coatings on the electrodes, we were able to retain this heat for a specific time."

It was necessary to work out with the molding company the proper thickness of the container walls and insist that they be held within certain strict tolerances. At present the adapted machine is sealing four tubes at a time and it is expected that eventually it will seal six at a time at a rate of 1,500 tubes an hour.

The tube itself is produced in a 16-cavity mold and the cap—which presented no particular problem—is handled in a 20-cavity mold.

The package is assembled and filled at the Ciba plant. First step is the sealing of the open bottom end of the tube, as has been described (Fig. 5), after which the tube is filled—to slightly more than half of capacity—with 1/4 oz. of Pyribenzamine through the small opening at the nozzle end, using a conventional ampul filler (Fig. 5). Meanwhile, the stainless steel spray tip has been assembled in the end of the separate capillary breather tube and the tube is fitted into the nozzle opening (Fig. 6). At this point the spray function is tested, then the cap is applied and screwed tight and the package is tested in a pressure device at 30 p.s.i. (see Fig. 7), to make sure there are no leaks in either the tube end or the cap seal.

While the tube has a capacity of 15 c.c., it is filled to not more than 9 c.c., in order to provide the proper volume of air for expelling. A well prepared, diagrammatic instruction folder which accompanies the "nebul-

N.
W.
E.-A.

THE ANSWER FOR YOUR PACKAGING PROBLEMS

N. W. E.-A., these are the model letters for the new PETERS SENIOR CARTON FORMING AND LINING MACHINE WITH AUTOMATIC CARTON AND LINER FEEDING DEVICE.

A large number of people interested in good packaging methods saw this new machine in operation at the Packaging Exposition. They were impressed by its speed, compactness, sturdy construction, and ease of operation.

No operator is required since machine is completely automatic.

We at Peters believe this machine is truly the answer for today's packaging problems.

If you would like additional information concerning this machine, just write us and enclose samples of the cartons you are now using.

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lizer" tube in its folding carton (Fig. 8) explains to the customer why the tube appears only half filled.

Last of the problems to be solved was that of labeling the tube. So far as was known, no adhesive commonly used for applying paper labels would stick to polyethylene and no satisfactory method of printing directly on the waxy-surfaced plastic had been found. Eventually, Ciba's attention was drawn by the claim of one maker of pressure-sensitive labels that his labels would adhere to "any smooth surface." The claim was found correct. Although the labels would not stick to the relatively rough surface of blow-molded polyethylene bottles, as originally produced, they worked perfectly on the smooth, injection-molded tube.

The tube, as illustrated, uses two of these labels. One is a white semi-wrap-around label printed in green with the usual brand name and other information required by the FDA. The other is a small, red, circular dot, applied just below the main label at the center of the tube, reading "Press here."

Use of the pressure-sensitive labels has an additional advantage. The product is a prescription item and most pharmacists prefer to remove the manufacturer's label. This can easily be done without marring the package. The "Press here" dot has deliberately been made a separate label, so druggists won't remove it.

The package has been thoroughly pre-tested and its developers are confident that all possible "bugs" have been eliminated prior to marketing. To prove the effectiveness of the seals, tests were made by an independent testing laboratory. It was found that the average breaking point of the bottom heat seal was at 70 p.s.i. pressure on tube and contents, and no breaks were encountered at the highest pressure possible to exert manually, 20 p.s.i. Flexing tests showed that the tube walls would stand 1,200 flexes—approximately three times as many as needed to exhaust the contents. Other tests were made in Ciba's own laboratories to determine what heat and cold might do to the container in the event that it was subjected to extreme conditions during shipment and warehousing; the results were completely satisfactory. To test extreme atmospheric pressures, packages were shipped to the West Coast in the non-pressurized cargo section of an airliner. Finished packages also have been carried by company personnel flying across the Atlantic and back, with no evidence whatever of leakage at any point.

It appears safe to conclude that a new, functional, atomizing package of wide usefulness has been born.

CREDITS: *Injection molding of tube and cap by Boonton Molding Co., Boonton, N. J., using Bakelite polyethylene for the base and Du Pont polyethylene for the cap. Polyethylene capillary tubing extruded by Jessall Plastics, Inc., Hartford, Conn.; metal spray tip by Micron, Inc., East Orange, N. J. Pressure-sensitive "Kum-Kleen" labels by Avery Adhesive Label Corp., Monrovia, Calif., through J. H. B. Hedinger, Inc., New York. Electronic heat-seal machine by W. T. LaRose & Associates, Inc., Cohoes, N. Y. Buffer papers for heat sealing by General Electric Co., Schenectady, N. Y. Carton by Wilkata Folding Box Co., Kearny, N. J. Tests by United States Testing Co., Inc., Hoboken, N. J. Buffer tapes by Minnesota Mining & Mfg. Co., St. Paul, Minn.*

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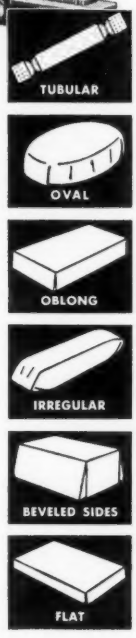

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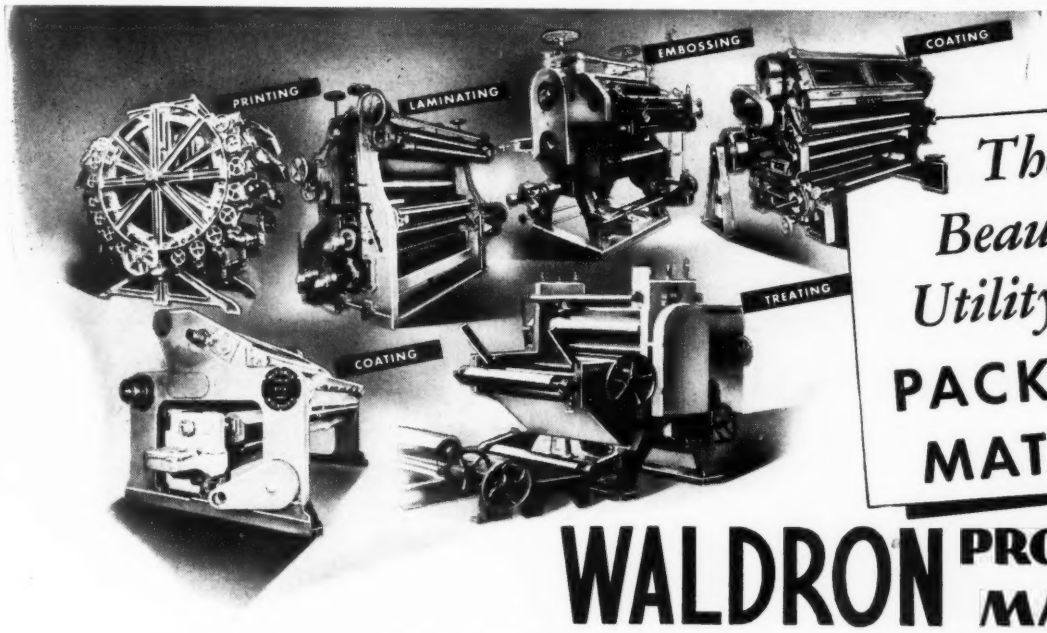

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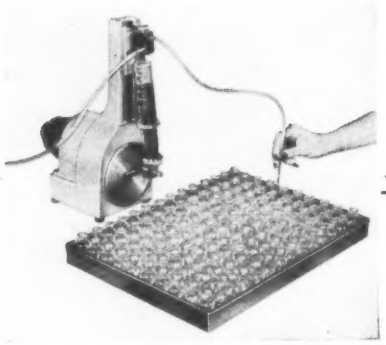

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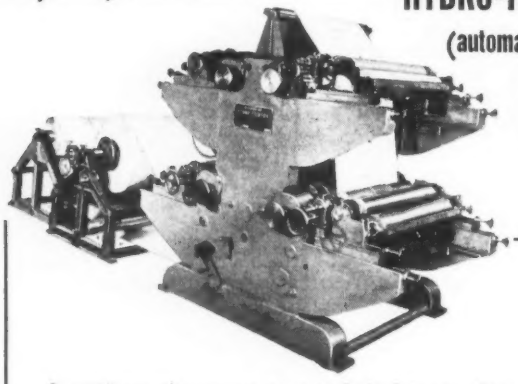

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Packaging seminar

A joint Navy-Air Force seminar of 75 packaging and materials-handling specialists, concluded April 1 at the U. S. Naval Station, New Orleans, set a practical pattern for unified thinking on technical problems common

Cdr. Royce (right) and student examine improperly packed electrical equipment intended for a Navy destroyer.

to all branches of the Armed Services. It was expected that similar reserve officer study groups would be formed to study industrial and economic problems as a result of this two-week conference.

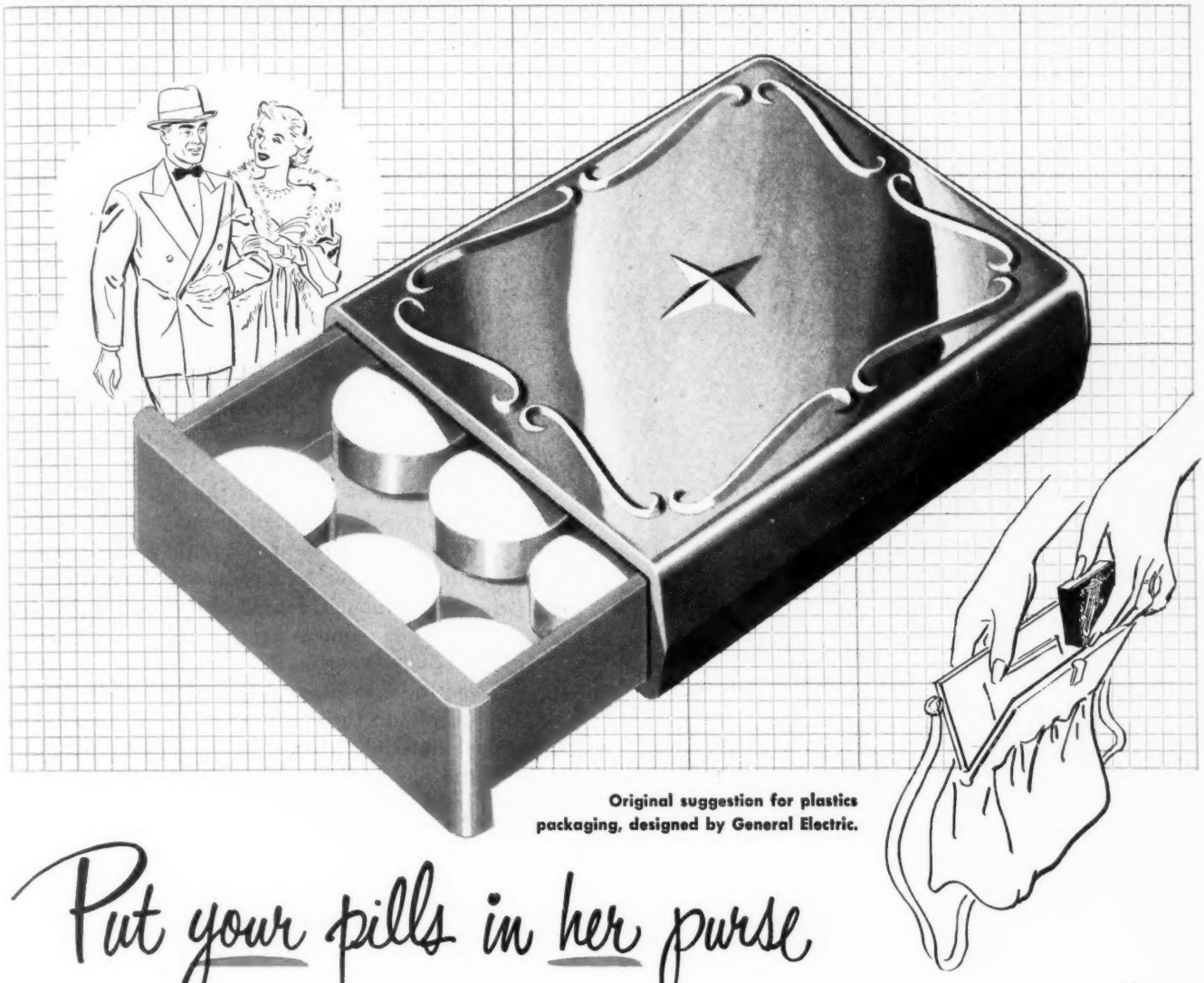
The reservists, key men in peacetime industry, were urged by Lt. Cdr. Clinton K. Royce, USNR, seminar director, to continue the efficient packaging methods they utilized in 1945. The seminar's co-director was Lt. Col. Herbert M. Lapidus, Air Force Reserve.

Panel discussions were held on preservation, packaging, packing, crating and marking; packaging materials and their uses, as well as on materials-handling equipment.

Toy packages

(*Continued from page 96*) capitalize on this limited period of popularity. A current example is the "Amosandra" doll, popularized by the radio infant "born" to Amos and Andy, made by the Sun Rubber Co. and designed in cooperation with Columbia Broadcasting System, Montgomery Ward and other retail merchandising experts. Amosandra is packaged in a two-piece cellophane window carton, the base being constructed with an inner tray of 0.018 chipboard covered with pink laminated paper in a quilted pattern to provide a cradle for the doll. The doll shows through the cellophane window surrounded by an eye-catching assortment of baby accessories, including gold embossed "birth certificate," nursing bottle, teething ring, soap tray, hot water bottle and rattle. The surface of the box provides

DESIGNED BY GENERAL ELECTRIC AT NO. 1 PLASTICS AVENUE



Original suggestion for plastics packaging, designed by General Electric.

Put your pills in her purse

WITH A G-E PLASTICS PACKAGE

Here's a feminine trinket that's useful as well as decorative. This handsome and handy pillbox was designed in colorful plastics by General Electric to give away with each hundred-tablet bottle. It's a sure-fire sales maker for vitamins or aspirin.

This pillbox is just another example of how General Electric's original plastics packaging can glamourize your product, heighten its eye appeal, increase sales. General Electric has no stock of these boxes. However, this design may be yours. Or whatever your requirements may be, G. E. will take on the job.

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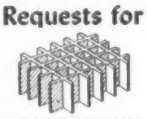

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ample space for printed promotion of the tie-up with the popular radio show.

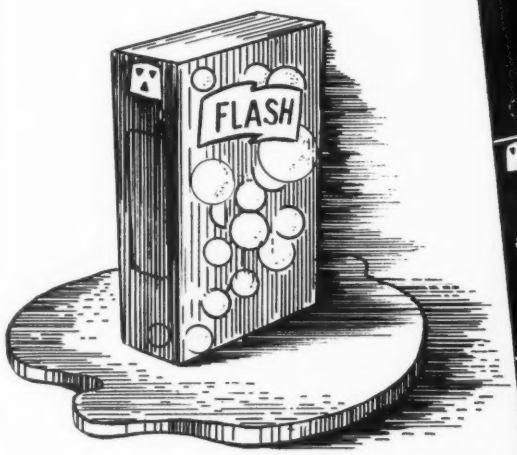
New trends are also apparent in the packaging of toy "wheel goods"—doll carriages, wagons, tricycles, etc.—as well as of children's furniture. More of these goods are being shipped set up or with very little for "Pop" to do in assembling them. So many complaints were received by dealers about difficult-to-assemble, knock-down toys that stores today do not favor such partially assembled packs. They like wheel goods and furniture in prepacks of sturdy corrugated material that can be sold from sample, but sent out from the warehouse in a factory pre-pack without further packaging.

The package can be a big help in selling toys. There is a decided desire for illustration and copy that give as much essential information as possible right on the package. There is, however, some opposition to age specifications on toy packages. Said one manufacturer, "All parents like to pride themselves that their Johnny or Mary is far ahead of his age. If Johnny or Mary is five years old, then any toy for a five-year-old is not acceptable. 'Our Johnny is way ahead of that,' they will say, although Johnny is probably just an average child and requires average toys for his age." Rather than put the age on the toy package, therefore, it is believed to be wiser policy to leave it off and have the sales people do the suggesting. Promotional and educational material such as that supplied by organizations like the Toy Guidance Council can be a great help to store personnel in training employees to assist shoppers in the selection of a proper toy.

The toy industry today is as aware of the effectiveness of modern techniques in packaging as any other industry whose success depends on impulse selling. Alert toy manufacturers have demonstrated that almost every packaging form is applicable to specific problems in the toy field. The manufacturers who are making the best sales records in the present toy market are those who are using packaging as a tool to win dealer and consumer acceptance.

CREDITS: ***Paul BonHop toys***—*Duffel bag for blocks, Bemis Bro. Bag Co., St. Louis, Mo.; Molly Kewl can, Geo. V. Clark Co., Inc., Long Island City, N. Y.; polyethylene bag for beads fabricated by Clearco Products Co., New York, of polyethylene film made by Harwid Co., Boston.* ***Strombeck-Becker Mfg. Co.***—*Carton for Bill Ding, Morris Paper Mills, Chicago.* ***Sun Rubber Co.***—*Amosandra carton, A. L. Garber Co., Ashland, Ohio.* ***Lincoln Lumber Yard***—*Carton, Morris Paper Mills, Chicago.* ***Ideal Novelty & Toy Co.***—*Carton, Blum Folding Paper Box Co., New York.* ***Plasticraft Train***—*Carton, Modern Folding Carton Corp., Brooklyn.* ***Reuhl Products***—*Set-up boxes for Caterpillar construction sets, Forsberg Paper Box Co., Madison, Wis.* ***Playmaker Toys***—*Humpty-Dumpty package, Acme Paper Box Co., Chicago.* ***Simon & Schuster***—*Folding carton for Tiny Golden Library, Western Printing & Lithographing Co., Poughkeepsie, N. Y.* ***Ed-U-Cards***—*Individual packages, Brooks & Porter, Inc., New York; display carton, Paramount Carton Co., Brooklyn.* ***Automatic Toys***—*Dizzy Liz carton, Art Display Printing Corp., New York.* ***Unger***—*Woodburning set package, Pioneer Flintkote Co., Los Angeles, Calif.* ***Holgate***—*Design, Frank Gianninolo, New York; display, Display Finishing Co., Long Island City, N. Y.; cartons, Robertson Paper Box Co., Inc., Montville, Conn.; acetate, Celanese Corp. of America, New York.*

PACKAGES ARE GOING MODERN



with

SEAL-SPOUTS*

Housewives dislike packages that are opened by cutting a dotted line—by cutting a corner—by punching holes.

They prefer packages with SEAL-SPOUTS because they are

- **Easy to open — Easy to close**
- **Easy to store on pantry shelves**
- **Easy to keep package contents dry — fresh — clean**

SEAL-SPOUTS are automatically inserted in the production line—without making holes in the packages—without slowing up production. The entire process is simple and speedy.

Send us one of your packages. We'll insert a SEAL-SPOUT and return it.

*T.M. Reg. U. S. Pat. Off

SEAL-SPOUT CORPORATION
363 Jelliff Ave., Newark 8, N. J.

PAPER... *with its Sleeves Rolled up!*

A new taste sensation is sweeping the country . . . corn meal magically puffed to airy lightness, French fried to delightful crispness, then enrobed in zesty cheese. A special Rhinelander glassine guards the delicate crunchiness of this fine confection. Try some!

Take it easy! Let an expert help you make candy. Yes, in a package, ready to cook, are the ingredients of the finest fudge you ever tasted . . . made by a great name in candy making (and packaged by Rhinelander).

There's a simpler way than this to make delicious ice cream. Open a package, stir a little . . . then relax while your refrigerator does the work. Another convenience made possible by the miracle of modern food processing and Rhinelander protective papers.

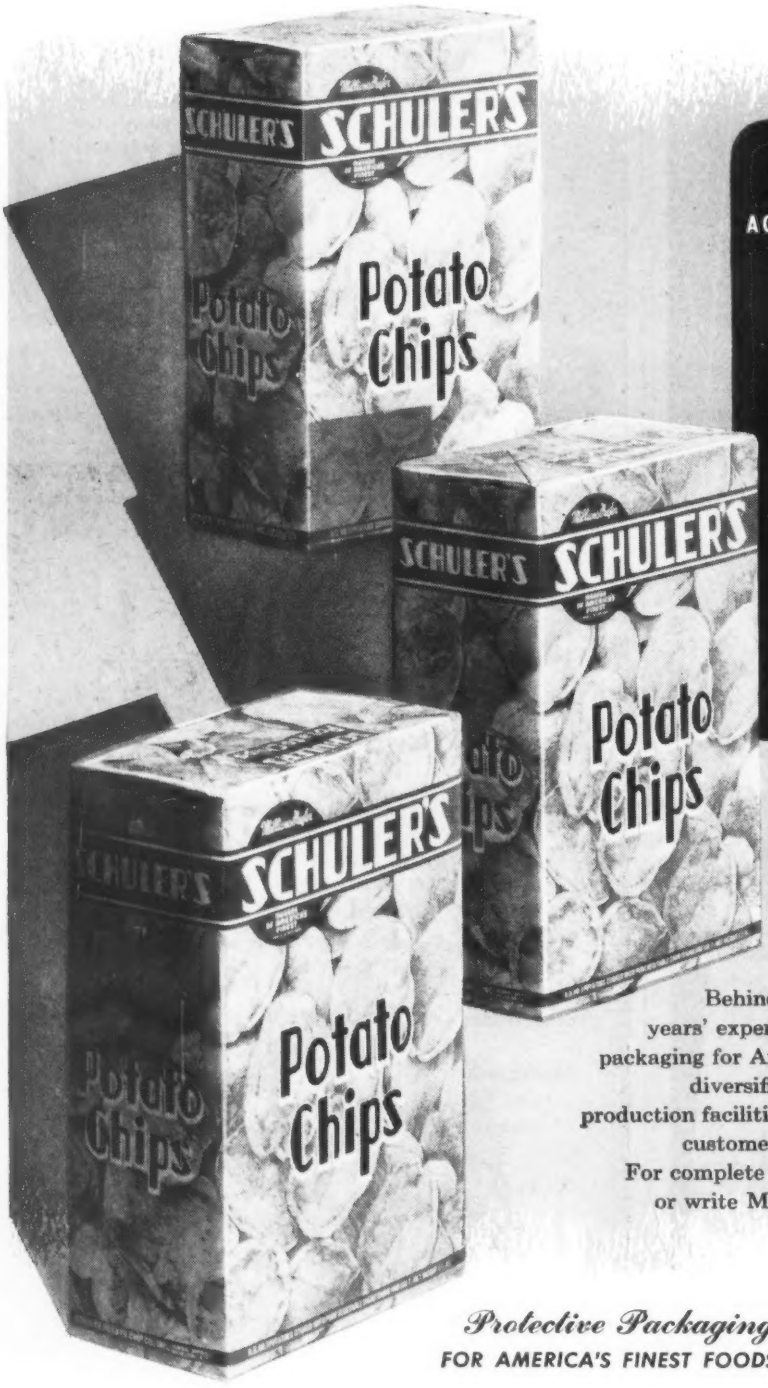
Glassine and Greaseproof—the functional papers that do so many tough jobs well.

RHINELANDER, WISCONSIN

Marathon Waxed Paper Overwraps Provide...

Appetite Appeal + Protection!

✳ Marathon Waxed Paper Overwraps have been selected to provide protective, sales-building outer wrapping for the famous Schuler's Potato Chips. Waxed paper's pure white opaque surface faithfully reproduces *in natural color* the appetizing good looks of the product inside. Freshness and flavor are *completely sealed in* by these moistureproof, heat-sealing wrappers. Marathon Waxed Paper Overwraps lend themselves perfectly to automatic machine packaging . . . with electric eye cut-offs for precision spotting of the wrapper on the box.



CHECK WAXED PAPER'S ADVANTAGES AGAINST ANY OTHER TYPE OF OVERWRAP!

- ✳ **Protection** . . . Firm sealing, moisture-proof waxed paper provides efficient product protection.
- ✳ **Adaptability** . . . Available in a wide range of weights and grades.
- ✳ **Economy** . . . Waxed paper is exceptionally *low* in original cost.
- ✳ **Workability** . . . Operates at peak efficiency on standard automatic packaging lines.
- ✳ **Designs** . . . Unlimited package design possibilities for modern merchandising.

PAPER
WAXED PAPER
PAPERBOARD
LAMINATED PAPERS
TRANSPARENT FILMS
HEAT-SEALING COATED MATERIALS

Behind every Marathon product today stands 40 years' experience and leadership in the manufacture of packaging for America's great food industries. Marathon's diversified supply of raw materials and integrated production facilities from pulp to printed package assure our customers of the best in protective food packaging. For complete information, ask your Marathon salesman, or write Marathon Corporation, Menasha, Wisconsin.

Protective Packaging
FOR AMERICA'S FINEST FOODS

MARATHON

Point-of-Purchase symposium

More than 5,000 attended the two-day annual symposium and exhibit of display advertising sponsored by the Point-of-Purchase Advertising Institute, Inc., at the Hotel Biltmore in New York last month.

Lee H. Bristol, president of Bristol-Myers Co. and keynote speaker at a luncheon-symposium for advertising executives, presented a talk on "Top Management's Viewpoint on the Importance of Dealer Displays." Parlin Lillard, sales promotion manager of General Foods Corp., said his company shows its high opinion of the importance of point-of-sale advertising by allotting over a million dollars a year to this medium.

New officers of the Institute, elected at its annual meeting are: president, John M. Palmer of Palmer Associates, succeeding C. L. Vanderbogart of Niagara Lithographic Co.; first vice president, Walter J. Ash, Consolidated Lithograph Corp.; second vice president, Herbert Zipprodt, Zipprodt, Inc.; treasurer, Alfred B. Rode of Rode & Brand. J. King Gould continues as executive secretary.

Directors elected were Mr. Vanderbogart, Mr. Ash and Carl Percy of Carl Percy, Inc. Advertising directors named were Meade Johnson, general sales manager of Yale & Towne Mfg. Co., Carl Ruprecht, advertising manager of The Underwood Corp., and David Bland, sales promotion manager of the Pepsi-Cola Co.

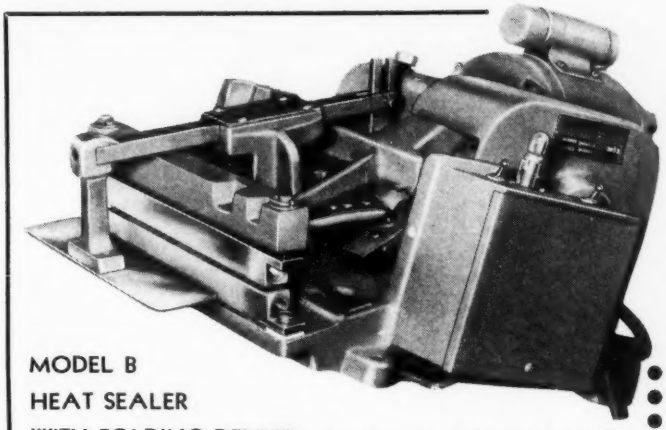
Other speakers who reported that their companies had proved the effectiveness and value of display advertising at point of sale included A. O. Buckingham and E. L. Reibold of Cluett, Peabody & Co., Inc., and William N. Farlie of Esso-Standard Oil. Frederick L. Wertz of Window Advertising, Inc., cited survey figures which have proved the circulation value of window display advertising at a much lower cost per thousand than any other advertising medium.

Many of the country's largest producers of all types of display advertising were among the exhibitors. Shown were the latest creations in color lithography, plastics, glass, metal and wood; elaborate display cases, display racks and demonstrating devices; new lighting effects; animated and motion displays; three-dimensional displays and even talking display pieces.

Colgate Dental Cream

(*Continued from page 103*) Cream," while one panel always was devoted to the pictorial demonstration that the paste "Comes out like a ribbon, lies flat on the brush." This style of tube and carton, with only slight modernizations from time to time, was used for more than 20 years.

From 1900 on, Colgate's had also been importing tubes from the French firm of Krieg & Zivy, Montrouge, which had absorbed a French branch of the German Richter firm and formed a company known as Societe des Anciens Etablissements G. Richter, in Nancy. With World War I threatening and with no adequate



MODEL B
HEAT SEALER
WITH FOLDING DEVICE — One of our complete line of heat sealers for sealing, folding, hole punching and coding all types of heat sealing bags.

HAVE YOU PACKAGE PRODUCTION PROBLEMS?

Our job is to supply standard equipment to do standard packaging jobs like wrapping, sealing, conveying and filling.

We also design and engineer efficient packaging systems, and design and build special machinery for special packaging needs.

If you need *any* kind of help in setting up or modifying a packaging operation, we'd like to consult with you.

WRAP-ADE MACHINE CO.
778 Bergen Street, Brooklyn 16, New York
PHONE: NEvins 8-8052

WAXES
For paper board impregnation

ZOPHAR MILLS 103 YEARS

FOR DIP COATINGS
EMULSIFIED WAXES
COATING WAXES

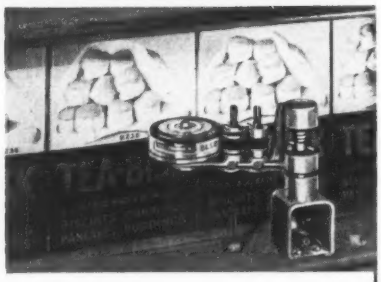
Meet Army and Navy specifications
WAXES FOR FUNGUS PROOFING
Our laboratory will welcome your problems

Zophar Mills, Inc. has been known for its dependable service and uniformity of product since 1846.

ZOPHAR MILLS, Inc.
Established 1846
106-26th Street • Brooklyn 32, New York

PRICE REDUCED !

on all models
GOTTSCHO
ROLACODER*
MARKING and
CODE-DATING
MACHINE



A labor-saving device
that pays for itself in weeks!

Volume production of famous ROLACODER Marking and Code-Dating Machines now makes drastic price reductions possible. Now—for an investment of well under one hundred dollars—you can use a ROLACODER to replace package-marking personnel . . . cut your packaging payroll. The ROLACODER automatically marks primary packages or shippers in sealing, packaging and conveying operations. Makes sharp, permanent marks—large or small—from interchangeable type or dies. Friction-operated . . . self-inking . . . easy to install.

Write for Data Sheet 6.0 . . . and new reduced price schedule

* *Pat. Pending*

MARK O MATIC
ADOLPH GOTTSCHO, INC.
MACHINES TO MARK WHATEVER YOU MAKE
183 Duane Street New York 13, N. Y.

time for a change in
OUTLOOK

Silverware has traditionally been sold in wooden chests. But when International Silver—world's largest silverware maker—offered a "completing set" of 24 odd pieces to supplement the basic set, they adopted this Kirk-molded, *clear plastic* chest. Elegance is preserved—eye appeal, economy, and protective features added. Sales?—*better than most optimistic predictions.*

Write us if our ability to mold merchandising magic into plastic containers fits into your plans. Or contact Mr. Deitemeyer, Traymore Hotel, Atlantic City, during Packaging Show, May 10–13.

F. J. KIRK MOLDING Co.
CLINTON, MASS.

resources at the time in this country for the type of decorated tubes they required, Colgate officials persuaded their German and French suppliers in 1913 to come to this country and organize the White Metal Mfg. Co. in Hoboken. The first tubes were shipped to Colgate from this plant in 1914. With Hubert Richter from the German plant came Karl Kleinbeck and in 1915 they were joined by Frederick Rentschler, representing Krieg & Zivy.

It is interesting to note how this move affected the development of the collapsible-tube industry in this country. The White Metal Mfg. Co., which has ever since been one of the principal American manufacturers of decorated tubes, was re-organized with American stockholders in 1919 with Col. Stanley M. Rumbaugh, president, and Hubert Richter, vice president. Mr. Kleinbeck and Mr. Rentschler in 1920 founded the Atlantic Mfg. Co. in Newark and in 1927 Mr. Rentschler split off to form the Art Tube Co. in Irvington, N. J. Another alumnus of the White company, William Erhard, was instrumental in the founding in 1919 of the Globe Collapsible Tube Co., now a subsidiary of E. R. Squibb & Sons.

About 1914 Colgate's business widened to the extent that additional suppliers of tubes were required and from that point on it did considerable business with A. H. Wirz, Inc., and the Peerless Tube Co., who were not far behind the Europeans in the development of decorated tubes. August Herman Wirz, in fact, is recognized as the father of the collapsible tube industry in this country, having brought back plans for machinery from the Vienna Industrial Exposition in 1870 and started manufacture at Philadelphia in that year.

Package-wise, Colgate's development from 1914 on was one of ever-widening production, with earliest adoption of various mechanical and design improvements. In 1925 the Colgate plant installed an automatic clip feeder; in 1930 it was among the first to eliminate clips entirely by the new method of triple folding and crimping the tube end automatically. The year 1928—which saw the merger of Colgate & Co. with Palmolive-Peet—also marked the introduction of molded plastic tube caps. A machine for applying the caps automatically was developed about the same time by the Wheeling Stamping Co.

The bold change in design from the traditional pinkish tube was made in 1933, shortly after S. Bayard Colgate—fourth generation descendant of the original William Colgate—became president of combined Colgate-Palmolive-Peet Co. The tube then became almost exactly as it is today—a brilliant white body with scarlet lettering, topped by a red band with the modern, streamlined lettering of "Colgate" in white. In order to maintain continuity, the carton was changed more gradually, but it soon emerged as the brilliant scarlet-and-white carton which, with the current tube, appears on our cover.

It is a tribute to the talent of Colgate's Package Design Department, which handled this change in 1933, that the package today remains as modern in treatment

Lithography
by STECHER-TRAUNG

SAVE MONEY WITH *Full Color*

Make every dollar you spend for advertising *pay out!* One way is to utilize the extra selling power of FULL Color. And the surest and most economical source for top quality FULL Color is *Lithography by* **STECHER-TRAUNG** Whatever your product or service, you'll find Stecher-Traung able and ready to put the sparkle and influence of FULL Color into your folders, booklets, brochures, inserts, box wraps, labels, etc.—*at worthwhile savings!* You can enjoy mass production economy on FULL Color **even on** surprisingly small runs. It will pay you to get the facts. Learn how you, too, can save money on FULL Color!

STECHER-TRAUNG

LITHOGRAPH CORPORATION

Rochester 7, New York • San Francisco 11, California

BRANCH OFFICES

Baltimore, Boston, Chicago, Columbus, Harlingen, Jacksonville, Los Angeles, Macon, New York, Oakland, Philadelphia, Portland, Sacramento, St. Louis, Seattle

Special New York Sales Associates—Rode & Brand

Specialists in FULL COLOR

ADVERTISING MATERIAL
LABELS BOX WRAPS GREETING CARDS
SEED PACKETS FOLDING BOXES
MERCHANDISE ENVELOPES AND CARDS

and as outstanding on drug counters as it was when first introduced. It is surprising to find that the design is 16 years old.

The famous ribbon opening was dropped during the war when tube restrictions ruled it out and has not been resumed. It is believed to have outlived its usefulness. The favored sizes and shapes of tooth brushes have gradually changed over the years; bristle tufts are shorter and narrower, and the round shape of the softer cream now dispensed from the tube lies better on the bristles. With the 1940 adoption of aluminum for the two larger sizes of tubes, also, mechanical problems arose, in that the rectangular ribbon opening was difficult to form in aluminum and often did not produce a smooth ribbon.

Colgate's well-oiled promotional big guns currently are aimed at popularizing the new 5-oz. "Economy" (largest) size, which late last year was added to the traditional $3\frac{1}{2}$-oz. "Giant," $1\frac{3}{4}$-oz. "Large" and 0.65-oz. "Medium" sizes. It is eloquent of the power of the finest packaging and promotion principles, consistently followed for 53 years, that the Economy tube can be advertised as costing "less per ounce than any other leading tooth paste."

CREDITS: (**Current packages**) *Tubes—Aluminum Co. of America, Pittsburgh: Metal Container Corp., Hoboken, N. J.; Peerless Tube Co., Bloomfield, N. J.; Sun Tube Corp., Hillside, N. J.; Victor Industries Corp., Brooklyn; White Metal Mfg. Co., Hoboken, N. J.; A. H. Wirz, Inc., Chester, Pa. Caps—Colt's Mfg. Co., Hartford, Conn.; Mack Molding Co., Wayne, N. J.; Standard Cap & Molding Co., Baltimore, Md.; A. H. Wirz, Inc. Cartons—American Coating Mills, Division of Owens-Illinois Glass Co., Elkhart, Ind.; Container Corp. of America, Chicago; Fibreboard Products, Inc., San Francisco; National Folding Box Co., New Haven, Conn.*

Gift trends

(*Continued from page 89*) Mother's Day, bon voyage, birthday, baby, wedding, etc.,—to suit almost any kind of gift planning.

Industrial gift packaging

A type of gift packaging that often reaches considerable volume is the packaging of their own products as gift boxes which many industrial firms send at Christmas to the press and other friends of the company. Sometimes they are also offered for purchase to stockholders. Naturally these gifts require some attractive type of container. Packaging divisions which have such a packaging problem will, of course, be interested in knowing how other companies have prepared such gift packages.

Last year, Durkee's put up an assortment of Durkee Famous Foods—spices, salad dressing, shredded coconut, etc.,—in large covered pottery baking dishes, all neatly packed for shipping in corrugated boxes. (See MODERN PACKAGING, Jan., 1949, page 114.) The pottery dish was an attractive re-use container for the recipient. General Foods presented to its business

FABRICATED* LEATHER

• *Looks* like Leather • *Contains* Leather
• *Wears* like Leather
• Costs much *less* than Leather

Perfect for all PACKAGED PRODUCTS

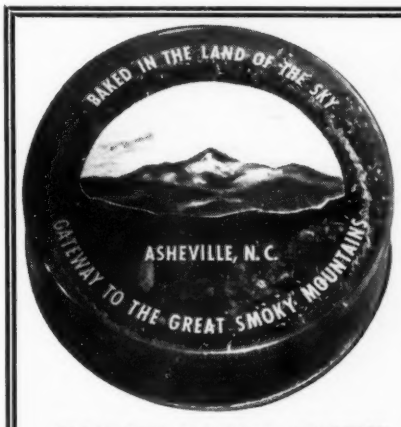
* Composed of approximately 40% ground leather by volume, plus other ingredients

* Reg. Trade Mark

UNI-MARK, inc.

New York—450 Fourth Ave. Boston—114 South St.

Agents in all principal cities



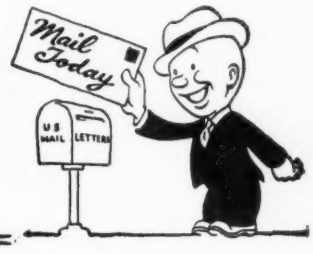
BOOST SALES WITH WEINMAN BROS. TRANSPARENT PLASTIC BOXES.

Fruit Cake, Nuts, Toiletries, Notion Specialties, Toys, Candy, Bakery Products, etc., all sell faster when packed the modern transparent way!

WEINMAN BROTHERS, INC.
3260 W. Grand Ave.
Chicago 51

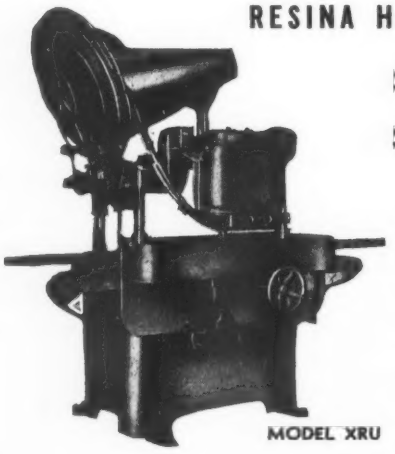
Please send samples. We are interested in packing_____
_____
_____

Clip to your letterhead.



RESINA Cappers

RESINA HIGH SPEED
STRAIGHT LINE
SCREW CAPPER



- Flexible
- Fast
- Fully Automatic

For Further Details Send for Descriptive Folder.

OTHER MODELS AVAILABLE

RESINA AUTOMATIC MACHINERY CO. Inc.

Court & Creamer Sts. Brooklyn 31, N. Y.

POLYETHYLENE for PACKAGING

Here's a source to fill all your requirements for polyethylene for packaging — a converter who works with polyethylene exclusively.

We'd like to demonstrate how polyethylene fits your packaging plans. Please write or call today.

BAGS
ROLLS
SHEETS
WRAPS
DRUM & CAP LINERS
DIE CUT SHEETS (plain and printed)

Chester Packaging Products Corp.

4240 Third Avenue, New York 57, New York
CYpress 9-4240

friends a large assortment of its products attractively packed together with a package of six wooden salad bowls, all in a large, specially printed corrugated gift shipping box. Sunshine Biscuits presented its cartons of crackers and biscuits in a round, transparent acetate hat box. Such packaging requires special planning and there are innumerable ways it can be done attractively.

Whatever the gift packaging problem, it should be studied this year from the standpoint of a changing market. It needs plenty of glamour to do its job on the counter, but it needs the plus value of well-studied salesmanship.

CREDITS: ***Rosemarie de Paris,*** *Bon Voyage package—Design, Robert W. Proom, New York; box, Henry Paper Box Co., Brooklyn; papers, Hughes & Hoffman, New York, and Louis de Jonge, New York; spiral-curled rim tubes (smoke stacks), Harcord Mfg. Co., Jersey City, N. J.* ***Norris, Inc.,*** *cellophane candy-box wrap—printed by Shellmar Products Corp., Mt. Vernon, Ohio, and applied by FA2Q box-wrapping machine, Package Machinery Co., Springfield, Mass.* ***Ocean City Mfg. Co.,*** *fishing tackle box—Design, Van Sciver Associates, Philadelphia; injection molding, Worcester Moulded Plastics Co., Worcester, Mass.; material, cellulose acetate butyrate (Tenite II), Tennessee Eastman Corp., Kingsport, Tenn.* ***Gourielli—****boxes for birthstone flacons, Bellmont Paper Box Co., Inc., Brooklyn.* ***Mem Co., Inc.,*** *Bath Bunny—Container, Everett Transparent Container Corp., New York, using Celanese Corp. Lumarith.* ***Tex Tan—****Belt box, Magnolia Paper Co., Houston, Tex., using Celanese Corp. Lumarith for cover.* ***Duchess cheese—****Pottery containers, Robinson Clay Products Co., New York; box designed by Maxwell H. Jacoby and made by Jacoby-Narce Corp., New York.* ***Park Lighter set—****Box, Paper Package Co., Indianapolis, using Monsanto Vuepak.* ***Wm. A. Greca Co., Inc.—****Hostess tray molded by Plastic te Corp., New York, of Monsanto polystyrene (Lustrene).* ***Haggar Co.—****Gift certificate labels made of Shell-Pli by Shellmar Products Corp., Mt. Vernon, Ohio.* **Life *fruit cake—****Laminated carton, (Shell-Pli) Shellmar Products Corp., Mt. Vernon, Ohio.* ***Sunshine Biscuit—****Plastic hat box made by Duranol Products, Inc., Brooklyn, of Celanese Lumarith.* ***Plastic lace—****"Mistlon" made by Minnesota Mining & Mfg. Co., St. Paul, Minn.* ***Rudolph Steiner*** *"15-puzzle"—Envelope (Suedene), Ohio Mfg. Co., New York.* ***Mary Chess*** *Silver Chest—Set-up box, Chaspec Mfg. Co., Greenwich, Conn.; laminated foil, J. Makowsky Corp., New York.* ***Nulomoline—****Metal containers developed by Pletcher & Pollack, New York.* ***Associated Merchandising Corp.—****Father's Day "bells," Mellon Corp., New York.* ***Armour Ham—****Design, Raymond Loewy Associates, Chicago.*

WVP at 0° deg. F.

(*Continued from page 138*) varied from a minimum of about 24 hr. for the Pliofilm (Sample 4) to a maximum period of about one month for the cellophane-kraft paper laminate (Sample 2) with the kraft side of the sheet exposed to the low relative humidity. When Sample 2 was evaluated with the cellophane exposed to the low relative humidity, the time required to establish equilibrium was reduced to about one week. The equilibration times for Samples 1, 3 and 5 were about 5, 14 and 3 days, respectively. In each determination, however, the measurements were continued for a period of time considerably longer than that required to establish equilibrium.

The permeability value of 0.0022 g./ (sq. m. × 24

DID PNEUMATIC HAVE A HAND IN YOUR DESSERT LAST NIGHT?

Installation of Pneumatic's Double Package Maker equipment in production of KRE-MEL Dessert at plant of Corn Products Refining Company, Argo, Ill.

PROBABLY YES—

because America's leading makers of packaged desserts use Pneumatic Packaging Machines!

And there's good reason why so many famous manufacturers rely on Pneumatic Packaging Machines. They've found that the sturdier construction, the precision engineering of Pneumatic Machines assure them of speedier, lower-cost package output!

Pneumatic's Double Package Maker, for instance, forms a protective lining and then shapes a carton around it. The snug-fitting inner bag allows maximum fill, offers far greater product protection.

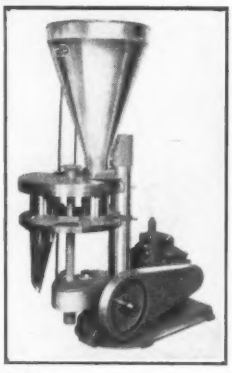
That's just one example of Pneumatic's packaging efficiency and convenience. In a half-century of highly specialized operations, Pneumatic research has developed more than ninety different machines to handle your packaging and bottling needs, speedily, competently . . . to give you Pneumatic's famous "lower cost per container" performance!

★ ★ ★

PNEUMATIC SCALE CORPORATION, LTD., 82 Newport Ave., Quincy 71, Mass. Branch Offices in New York, New York; Chicago, Illinois; San Francisco and Los Angeles, California; Seattle, Washington.

PNEUMATIC
LOWER COST PER CONTAINER

PACKAGING AND BOTTLING MACHINERY

WHIZ-PACKER
PACKAGING MACHINES
FAST • ACCURATE
QUIET • INEXPENSIVE
In the experience of LEADERS of the PACKAGING INDUSTRY, the FAMOUS WHIZ-PACKER fills from the tiniest up to 10 pounds at any practical speed desired with amazing accuracy.
POP CORN CRYSTALS NOODLES
FROZEN FOODS CEREALS BEANS
POWDERS SPICES NUTS
CANDIES SEEDS ETC.
SCIENTIFICALLY ENGINEERED AGITATION SUPPLIED TO SUIT ANY PRODUCT
SEE US AT BOOTH #414
NATIONAL PACKAGING SHOW
ATLANTIC CITY, N. J.

SOLE DISTRIBUTORS
EASTERN STATES
Amsco Packaging Machinery, Inc.
31-31 48th Ave. Long Island City, N. Y.
WESTERN STATES
Simplex Wrapping Machine Co.
534 23rd Ave. Oakland, Cal.
MID-WESTERN AND SOUTHERN STATES:
Miller Wrapping and Sealing Machine Co., 18 Clinton St., Chicago, Ill.
MANUFACTURED BY
Frazier & Son
334 CORTLANDT ST., BELLEVILLE 9, N.J.

Developing the Turkey Trade?

• If your product is bulk packaged in bags, cartons or car loads, why not give your sales a boost with samples in product-selling Visi-tainers, the acetate window box. Write today for Visi-tainer ideas in Folder #5.
OLD DOMINION Box Company Inc.
CHARLOTTE, N. CAROLINA

hr.) obtained for Sample 2 is near the lower limit of accurate measurement for the equipment described. If materials having a lower WVP were to be evaluated, it would be necessary to modify the method for controlling the rate of air flow or increase the size of the test specimen.

General discussion

By utilizing a cryostat and performing the WVP measurements in a bath which is controlled to within a few hundredths of a degree Centigrade, the conditions are such that accurate evaluation is favored. However, should a high degree of accuracy in the permeability measurements tend to be of a lower order of importance, as in a routine test, it may be desirable, insofar as convenience is concerned, to eliminate the bath B and instead perform the permeability measurement in a cold room. The advantages to be obtained in performing the measurements in a cold room conditioned at the desired temperature would be: (1) the test assembly would always be in equilibrium with the low temperature, thus eliminating the delay otherwise required for cooling the assembly to the temperature of the bath, (2) it would eliminate the necessity of breaking and making air-line connections, (3) it would eliminate the care that must otherwise be exercised to avoid the danger of condensing moisture in the air lines and the chamber of the test assembly and (4) it would be possible to arrange to have the specimens in equilibrium with the low temperature *before* they are inserted in the test cell, also accelerating the test.

In performing the permeability measurements in a cold room, a cryostat for controlling the temperature of bath A would still be required as a means for obtaining the desired low relative humidity. The test assembly which is shown immersed in bath B would merely be exposed to the room. If the temperature control of the room is poor, however, it is strongly recommended that the test assembly be placed in some sort of thermally insulated cabinet. This cabinet would serve as a means for damping out the temperature fluctuations in the room and would thus provide a relatively constant temperature for the assembly. Since the coil L would be exposed to air instead of a liquid, it should be lengthened to retain its heat-exchanging capacity, thereby ensuring that the air entering the test cell is in equilibrium with the temperature of the room or cabinet.

As a further consideration of the flexibility of the method, it will be seen that the space below the specimen could be conditioned in the same manner as that above the specimen. By making the lower chamber a duplication of the upper, it would be possible to control the vapor-pressure gradient across the specimen for a permeability determination at any desired value. Moreover, the facilities of this arrangement would enable one to check the differences in relative humidities both above and below the specimen. This would be of value in ascertaining when equilibrium conditions have been attained and when the rate of transfer of moisture

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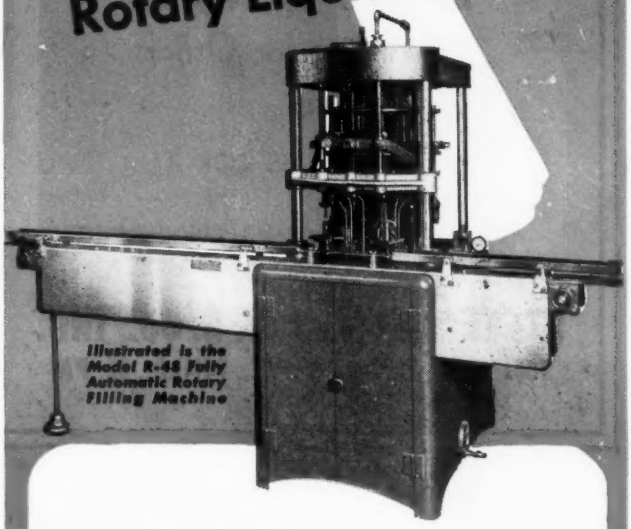

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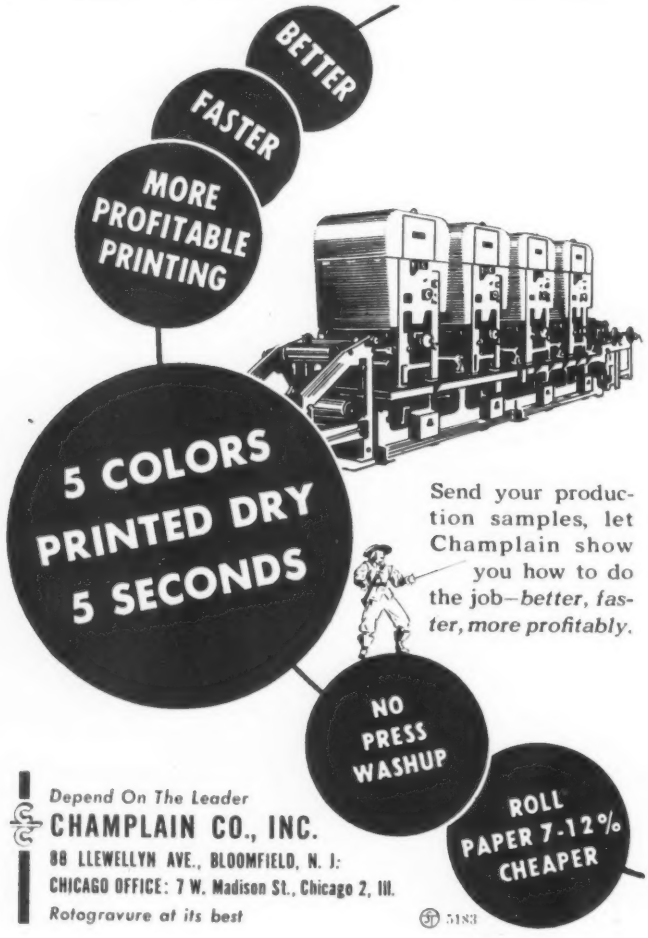
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through the specimen is at a constant value. Ideally, the measurement would be continued until the observed increase in the relative humidity above the specimen equalled the observed decrease in the relative humidity below the specimen. By virtue of establishing a material balance, the uncertainty of knowing when equilibrium has been attained is removed. Although accomplished gravimetrically, this is the principle employed to good advantage in the method described by Cherepow (2).

To condition the air flowing through the lower chamber, a third bath would be required if the measurements were performed in a cryostat rather than in a low-temperature room. The principle involved in conditioning the air to a given high relative humidity would be the same as that for the lower humidity, as described earlier. As in the case of baths A and B, the third bath could be cooled with the same compressing unit. Cooling of the three baths with a single compressing unit is common in refrigeration practice and would not involve any difficulty.

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Unmistakably Mayer

(*Continued from page 123*) a "yellow band" motif was carried through on all products except barbecued beef and barbecued pork. The designer took note of the fact that the company for years has been promoting "the sausage with the yellow band" in its advertising program. It is interesting to note that this design motif was carried through without any mention of "yellow band" in product copy, except on Kartridg-Pack wieners, where the phrase appears in small type.

Copy treatment is on the minimum side, with strong product identification on the front panels and detailed information confined to rear panels. The "Little Oscar" chef, formerly used on a number of the company's packages, was eliminated entirely because it was felt that it merely confused the design and did not constitute a constructive package element.

From the color standpoint, white was incorporated to as large a degree as possible to further the feminine appeal of the packages and to reflect cleanliness. The elimination of dark brown made for economy in many instances, although this monetary saving was offset to

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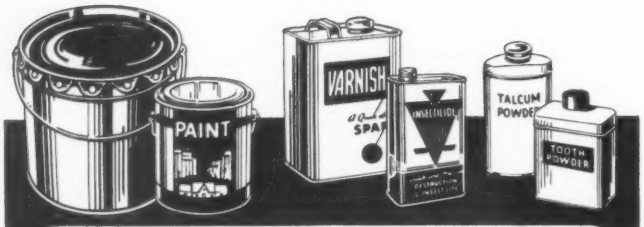

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The Oscar Mayer redesign activity covers not only primary packages, but is also being gradually extended to include the corrugated shipping cartons, which employ the trademark reduced to one color for economy of printing. Business stationery and truck decalcomania are also covered in the program and two different approaches in applying the new designs to the company's trucks are being planned. One of these methods, purely institutional in character, is built around the use of the yellow band and company trademark, while the other also includes a continuous band of Kartridg-Pack Yellow Band wieners for unmistakable product identification.

CREDITS: *Complete redesign program, Robert Sidney Dickens & Associates, Chicago. Cartons, Marathon Corp., Menasha, Wis.; Consolidated Paper Co., Monroe, Mich.; Forsberg Paper Box Co., Madison, Wis.; Empire Box Corp., Garfield, N. J., and John Strange Pail Co., Menasha, Wis. Lithographed cans, American Can Co., New York. Wrappers, Daniels Mfg. Co., Rhinelander, Wis.; Milprint, Inc., Milwaukee, Wis., and Kalamazoo Vegetable Parchment Co., Kalamazoo, Mich. Labels, Straus Printing Co., Madison, Wis.; Shuman Labels, Chicago, and Walter Carqueville Co., Chicago. Artificial casings, Visking Corp., Chicago; Transparent Package Co., Chicago, and Sylvania Division, American Viscose Corp., New York. Shipping containers, American Box Board Co., Chicago; Container Corp. of America, Chicago; Menasha Wooden Ware Corp., Menasha, Wis., and Downing Box Co., Milwaukee.*

Gumpert's cake mixes

(*Continued from page 113*) Gumpert's mix gives "perfect results every time"; is "economical to use" and is "easily prepared." A final touch is the placement of a smaller, blank lace-doily spot on the top of the carton as a price spot—making this feature decorative as well as useful. Directions appear on one side panel and recipes on the back, surrounded by a lacy border.

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CREDIT: *Carton designed and produced by Lord Baltimore Press, Baltimore, Md.*

[2] See "Contest Winners," MODERN PACKAGING, April, 1949, p. 172.

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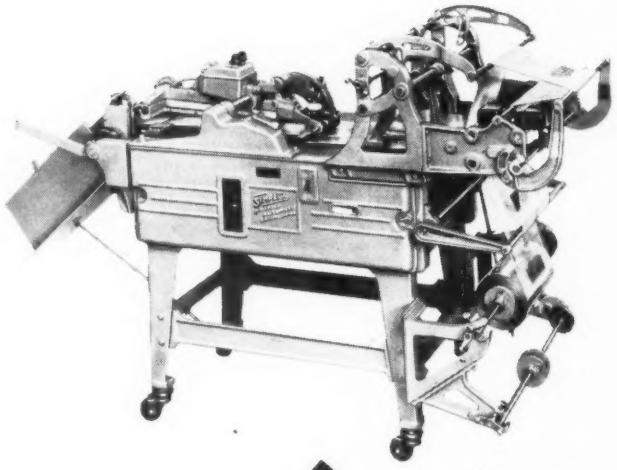

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to package...

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from the producers of Kum-Kleen labels

YOU CAN NOW MECHANIZE your labeling with the new Kum-Kleen Electric Label Dispenser at a fraction of the cost you expect... without the purchase of bulky, high-cost machinery... without rearranging your labeling operation.

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Modern packaging

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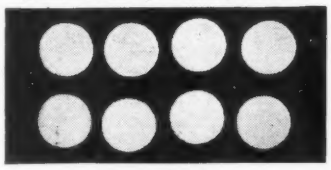
FOIL

ALCOA PACKAGING REPORT NO. 49-2

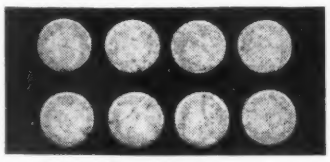
90 day accelerated test proves drug tablets stay potent... firmer...in Alcoa Foil Wrap

Benzedrine sulfate tablets after 90-day storage test.



Sample A

Package material—Alcoa Foil (See "Conclusions")
Color of tablets—Slightly grey
Firmness of tablets—¾ std.
Original average wt. of twenty tablets—6.1423 gm. Average wt. at end of test—6.1470 gm. Gain—.0047 gm.



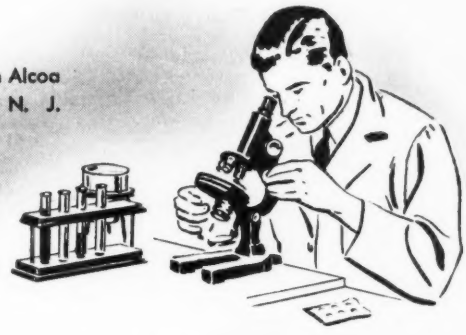
Sample B

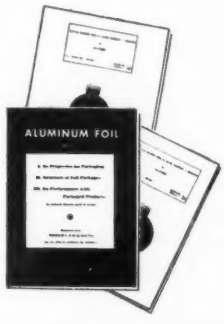
Package material—As used at time of test
Color of tablets—Badly discolored
Firmness of tablets—Very soft
Original average wt. of twenty tablets—6.1423 gm. Average wt. at end of test—6.9704 gm. Gain—.8281 gm.

Object of lab test: to evaluate aluminum foil's package protection for cold pressed drug tablets, when subjected to relatively high temperature and humidity. Storage time—90 days; temperature, 106° F; relative humidity, 90%.

Conclusions: ".001" 2S-O Alcoa Aluminum Foil, laminated to transparent sheeting with thermoplastic heat-seal coating on the opposite side of the foil, gives superior protection to drug tablets. Keeps them firmer . . . preserves potency better than other wrapping materials tested." To give your perishable product better protection, wrap it in Alcoa Foil. For the names of package manufacturers who are experienced in working with foil, write ALUMINUM COMPANY OF AMERICA, 2129 Gulf Building, Pittsburgh 19, Pa.

End of test—examining drug tablets in Alcoa Packaging Laboratory, Edgewater, N. J.





Further information about the results of Alcoa Packaging Laboratory tests is available. Write us concerning your packaging problems.

ALCOA ALUMINUM FOIL

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another "SELL-A-VISION" idea in VUEPAK

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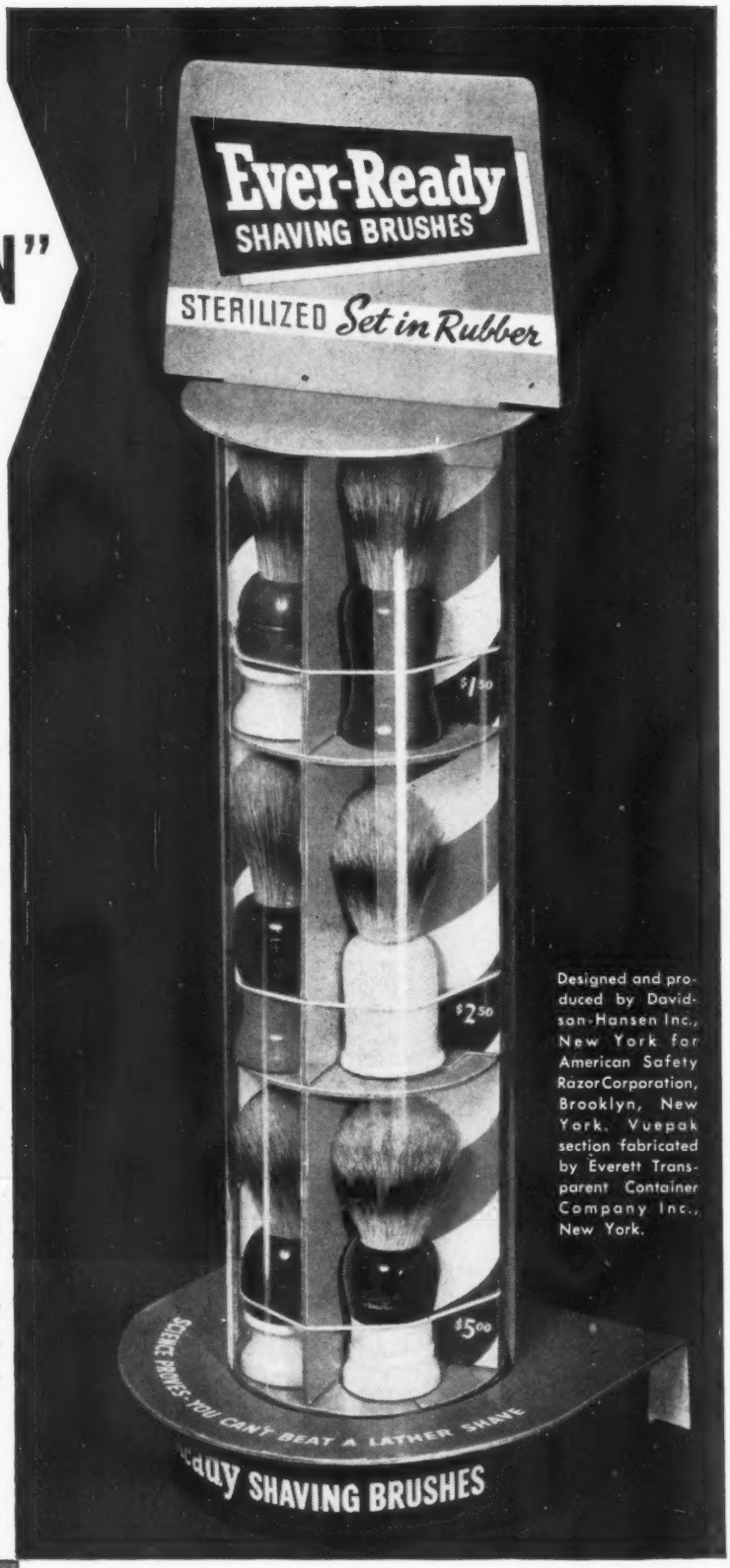

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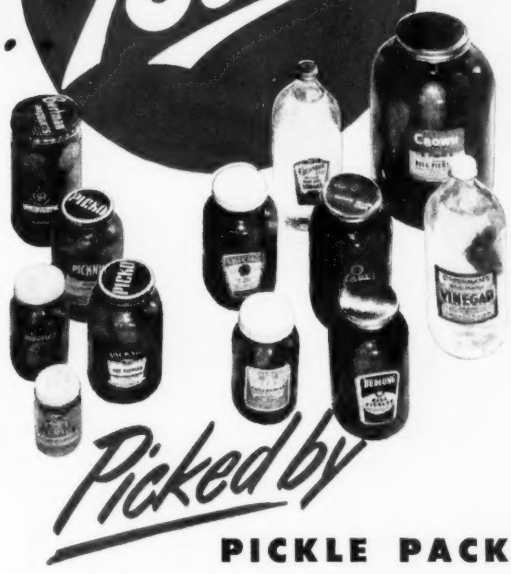

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● Over 80% of all food is bought in self-service stores. And much of it is bought on *impulse*. That means a continuous fight for consumer favor. Give your products the winning weapons: sparkling-clear, fine quality BALL Glass Containers. Seven strategically located Ball plants offer quickest service, plus sound counsel on your packaging needs. Call Ball *today*.

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● *Here are a few of the leading brands of pickles, vinegar and other food products whose quality is effectively displayed in BALL Glass Containers—always tops in eye-appeal!*

Morton's
FROZEN
CHICKEN
POT PIE
Southern Style
INGREDIENTS: Chicken Broth, Chicken Meat, Potatoes, Flour, Peas, Carrots, Chicken Fat, Celery, Chicken Skin, Salt, Seasoning, Water, Chicken Giblets, Onions, Artificial Flavoring, Black Pepper, Red pepper in a Pie Crust consisting of Flour, Shortening, Milk, and Salt
NET WEIGHT ONE POUND 4 OZ
PRICE
JUST BAKE and SERVE · NO DEFROSTING · NO SPECIAL PAN
A PRODUCT OF MORTON PACKING COMPANY
LOUISVILLE, KENTUCKY
Morton's FROZEN CHICKEN POT PIE

Shellmar Packages make life simpler

. . . for the housewife, the dealer, and the packer. For example, Morton's Frozen Chicken Pot Pie. It's a complete ready-to-bake product . . . but packaging it presented a stiff problem. It was solved by overwrapping the inner waxed carton with Cellophane beautifully printed with a full-color photographic reproduction of the Pot Pie . . . plus carefully-placed selling and direction copy. NOW, this fine Morton product reaches the consumer in prime condition . . . ready to serve after "just baking".

This outstanding Morton's Frozen Pot Pie package was designed and market tested by the Ralph H. Jones Advertising Agency of Cincinnati, Ohio.

If your package must SELL your product as well as PROTECT it, a Shellmar package is probably the answer. Your nearest Shellmar Office is equipped to show you how.

Naturally, it's Packaged by Shellmar

Sales Offices in Chicago, New York, Cincinnati, Denver, Detroit, Kansas City, Minneapolis, San Antonio, Atlanta, Baltimore, Boston, Philadelphia, Pittsburgh, Los Angeles, Salt Lake City, San Francisco, Seattle.

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Carton overwrap: No. 450 MSAT DuPont Cellophane, printed in Shellmar's Colodense Process